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Space World '97 was business as usual for Nintendo. Its software lineup was typically well crafted and possibly its best ever – at least in terms of a range of eagerly awaited potential classics. Its range of hardware and software announcements were brimming with originality and quirky ideas. And even company president Hiroshi Yamuachi's exceptionally lengthy address provided some interesting food for thought. But then business as usual for Nintendo rarely means anything other than encouraging news for gamers – it's only really the shape this takes that is ever left to the imagination.

But Nintendo knows the value of heady speculation and as always there were just as many questions thrown up by Space World '97 as there were answered by it. The hordes of people satisfied by the stunning and virtually complete *Legend of Zelda* will no doubt now be wondering how its disk-based cousin will fit into an already rich gaming agenda, while those intrigued by its range of titles in the *Mario Artist* and *Pocket Monsters* series could be forgiven for being perplexed by its lack of a western-style killer app for the system.

Where disappointment could have been found, though, was in the shabby quality of many thirdparty efforts, and Nintendo's delay of both key software titles and hardware – again, the latter a move that's par for the course for a videogaming giant that knows how to play the trade show game better than anyone else in the business.

Contacts

Editorial

Future Publishing
30 Monmouth Street
Bath, BANES BA1 2BW
Telephone: 01225 442244
Fax: 01225 732274
email: edge@futurenet.co.uk

Subscriptions

Future Publishing Ltd
FREEPOST BS4900, Somerton
Somerset TA11 7BR
Telephone Customer Services:
01225 822510
Telephone Customer order line:
01225 822511
Fax: 01458 274378

People on Edge

Jason Brookes editor
Tony Mott associate editor
(Going elsewhere to let off steam, Bennett)
João Sanches reviews editor
Casper Field writer
Terry Stokes art editor
Craig Brooks deputy art editor
Nicolas di Costanzo Tokyo bureau

Joanna Paget advertising manager
Tarik Browne classifieds
Jane Geddes recruitment
0171 447 3309
Advertising fax 0171 447 3399
Zoe Rogers production coordinator
Richard Gingell production manager
Production fax 01225 732293
Sarah Orchard ad design
Janet Anderson production controller
Judith Green group prod manager
Jon Moore pre-press services
coordinator
Simon Windsor colour scanning
Mark Gover, Jason Titley,
Oliver Gibbs pre-press services
Mark Williams foreign licenses
0171 331 3924
Jane Ingham publishing director
Greg Ingham managing director
Nick Alexander chairman

Colour reproduction

Colourworks Repro, Bristol
Phoenix Repro, Bath

Print

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VIEWPOINT

EXPRESS YOURSELF IN **EDGE** – WRITE TO: LETTERS, **EDGE**, 30 MONMOUTH STREET, BATH, BA1 2BW (EMAIL: edge@futurenet.co.uk)

After reading your interview with Red Lemon, my impression that most British and American software houses only get excited by new graphic effects appears to have been confirmed. It's funny how I can't seem to recall Shigeru Miyamoto boasting about his latest 3D engine.

Lately I have been playing *Lylat Wars* and *FFVII*. Both, although from very different genres, are examples of game design using cutting-edge technology instead of suffering from it. All Red Lemon could talk about was the latest technology and breaking new ground. While *Aironauts* looked very nice, the gameplay sounded like an afterthought. Don't get me wrong – they're not the only ones by a long way, but the fact of the matter is that the Japanese seem to think gameplay first and then use whatever engine that will best suit it. Most western developers seem to do the opposite. However, teams like Rare, Shiny, Delphine and DMA show that we can do it, so let's concentrate on making playable and not just pretty games.

**Stuart Murton,
Surfnet Computers**

The problem facing many developers – Red Lemon included – is that while **Edge** (and hopefully its readers) recognises the importance of the point you're making, the vast majority of the gameplaying public and press appear not to. The success of titles such as *The Lost World* and *Croc* is sad proof of this problem. Rest assured that **Edge** will continue to argue the case for gameplay over graphics at every turn.

There seems to be quite a debate emerging regarding whether the PC's control system is inferior to that of the consoles. While I'll agree that both the PlayStation and Nintendo 64 both have better pads than those that are available for the PC, I think there are a few points which are being overlooked.

Taking Simon Wilmer's letter in **E53** is a good starting point. He

states that the PlayStation version of *Tomb Raider 2* boasts superior playability through control responsiveness. Excuse me? I own all three of the previously mentioned systems, and have played *TR2* on my PC and PlayStation side by side. As far as I could tell, they handled identically, with the only difference being the PC's higher frame rate. How this makes the PlayStation version more playable is beyond me.

The other game mentioned was *Turok*. Admittedly, while I can't imagine playing *Mario* with anything other than the Nintendo 64's pad, I can't see how it is well-suited to a game like *Turok*. Okay, mice weren't invented with playing games in mind, but I'd like to see an N64 player beat a PC owner at *Quake* using their respective controllers. What it boils down to in the end is that no single controller is ever going to suit every game and everyone's style of playing – although I'm sure someone will try and prove me wrong!

**Roger Isaac,
via email**

Few could have predicted the innovation that the N64 joystick represented, and the signs are that Nintendo and others will continue to experiment with these essential peripherals. The PC will inevitably be party to control developments, as Microsoft's Sidewinder Force Feedback joystick shows. As for your inability to distinguish between *Tomb Raider 2* controls on PC and PlayStation, **Edge** can only assume you have somehow adapted a Sony pad and wired it up to your PC...

I have owned an N64 since the original UK release, and haven't regretted it since – despite the price drop (although my friends would like to believe otherwise). The games that I've bought, including *Super Mario 64*, *GoldenEye*, *Lylat Wars* and *ISS64*, have all been the best in their respective genres. The only thing I find infuriating about the N64 is THE Games' UK marketing strategy.

I am 17, and can see first-hand the affect that Sony's campaigns have upon one of the key market sectors. THE's creations pale in comparison to the eye-catching advertisements being produced by Sony's marketing department. Many of my friends are buying N64s, but this is primarily through my preaching about the machine. What Nintendo doesn't seem to realise is that it isn't connecting with the (wealthy) section of the market that watches football matches – or that goes clubbing. Most potential buyers will see quick glimpses of games such as *Wipeout 2097* and *Tekken 2* because Sony are sponsoring a big football match, or is associated with a night out. Nintendo needs to apply its 'quality over quantity' method to its advertising, and address this key section of youth.

Compliments on the magazine.

**Chris Hassell,
via email**

In many ways, Sony's fresh arrival among the public in 1995 gave it the advantage of being able to market the PlayStation without any hindering intellectual baggage. Nintendo consoles have traditionally been regarded as 'toys' by the general public, and so have, for the immediate future at least, the added task of attempting to combat that perception. Having said that, **Edge** agrees that THE is not targeting specific and potentially lucrative areas of the market perhaps as well as it could, although the recent campaign does represent a significant (and much-needed) improvement.

I am a little concerned that the games currently appearing for the N64 seem to exhibit speed problems. Although I think *Extreme-G* is an excellent game, it uses fogging to disguise the pop-up and there is slowdown when big weapons detonate.

I was pinning my hopes on *Top Gear Rally* being the definitive N64 racing game, but **Edge's** review indicates otherwise – though I'm

still tempted to buy it anyway!

Compared to early games such as *Ridge Racer*, current releases on the PlayStation look light years ahead. Do you think that in the same way it will take a while for more impressive N64 titles to come out – that the coders are still learning what the hardware can do?

Alternatively, does the N64 have a problem with drawing large numbers of polygons? It can texture and filter them very well, but what about raw numbers? (Titles such as *WaveRace* and *Lylat Wars* would appear to disprove that there is an inherent problem.)

Also, I have a brief comment regarding the covermounted CDs. As not everyone has access to a PC, wouldn't a videotape – as other magazines sometimes include – be more universal?

**Wayne Andrews,
via email**

Any new machine faces an inevitable increase – at least graphically – in software quality as developers get to grips with the intricacies of its structure.

Perhaps predictably, N64 thirdparty developers are the most affected with the majority still struggling to master Nintendo's machine, something which – other than the videogame giant itself – only Rare has managed to achieve with a degree of consistency.

Interestingly, in your letter you illustrate this very point by naming two titles you are happy with – *WaveRace* and *Lylat Wars* – both of which are Nintendo-developed games. Expecting that matters are to change soon may prove unrealistic; visiting this year's Space World event offered sufficient proof to the contrary, with all of the most impressive titles still first (Nintendo) or secondparty (Rare) developments, the majority of thirdparty software still lagging some way behind.

It's true that the N64 is a more complex and therefore more difficult machine to program than the PlayStation, and this alone will obstruct the efforts of all but the most talented developers.

Cutting Edge

The latest news from the world of interactive entertainment



NINTENDO STUNS AT SPACE WORLD '97

Nintendo's Space World '97, held in Tokyo in late November, was cautiously hailed as a success by Western delegates. The unveiling of playable versions of *The Legend of Zelda*, *F-Zero X*, and *Yoshi's Story* confirmed all high hopes for these flagship titles, and 1080° *Snowboarding* proved that there's innovation beyond Nintendo's established game franchises. On the other hand, it was announced that the Japanese launch of Nintendo 64DD has been postponed from March until July (with no news of a US or European release date), there was little evidence to suggest that thirdparty Nintendo 64 development is getting any better, and there's no guarantee that *Pocket Monsters* – by far and away Nintendo's biggest success of 1997 – will repeat its bizarre success outside of Japan.

But perhaps the main talking point of the show was the unveiling of Nintendo's exceptional *Legend of Zelda* (see page 38) currently still planned for a huge 256Mbit cart and not for 64DD as had been previously forecasted. This not only marks a new upper limit on cart size (which is both good news for gamers and developers) but perhaps also a temporary sidelining of the entire Nintendo 64DD project – at least in terms of its direct application to conventional videogames. As a game to push the system further than anything before it – many

have already suggested that it's better than *Super Mario 64* – it should set new standards upon its planned Japanese release in April next year.

But it wasn't just *Zelda* that ignited the hopes of gamers at Space World '97. Three other titles also proved that the Nintendo 64 will continue to remain the platform of choice for gameplay connoisseurs. 1080° *Snowboarding* (previously entitled *Vertical Edge Snowboarding*) possibly emerged as the biggest surprise from a newly formed group within Nintendo's Kyoto-based HQ. This offers boarding thrills with a subtle blend of hi-tech simulation and arcade action and firmly puts all other efforts in the shade (see p52). *F-Zero X* (p40) is the long-awaited sequel to the 16bit SNES classic, and is the first 3D game on Nintendo's machine to run at a blisteringly smooth 60fps. So fast, in fact, that **Edge** must confess to feeling slightly queasy after a session hurtling along its busy tracks (although a Space World hot dog could equally have been to blame).

Yet another update to a classic SNES game was *Yoshi's Story*, which takes 2D gaming to new heights, the Nintendo 64's analogue controller giving a new twist to the platform-based, run 'n' jump gameplay. Visually this title redefines 2D platform gaming with a sumptuous mixture of prerendered





Most of those lamenting NCL's decision to delay its official 64DD launch until July were partially appeased by the introduction of curious future hardware add-ons such as the novel GB Pak (above). The *Mario Artist* series (left) and *F-Zero X* (top left) were show highlights

and polygon-based 2D that owes much to the graphically rich prerendered scenery of *Donkey Kong Country* but with the intricate, deep gameplay mechanics of *Yoshi's Island* underpinning it all.

Aside from these flagship titles, the impact of other software debuting at Space World was more than overshadowed by the announcement of several new hardware additions encompassing not only its 64bit games system but its seven-year-old Game Boy technology, too. Naturally its 64DD player commanded the most attention – despite the fact that games such as *Zelda* had curiously given way to creative software along the lines of the SNES title *Mario Paint*. Fortunately, its trio of titles in the *Mario Artist* series – *Talent Maker*, *Polygon Maker* and *Picture Maker* – did show signs of ingenuity, transforming the N64 into a creative platform with the emphasis on fun and accessibility rather than practical application. The fact that data is transferable between all three titles should make this an attractive series in Japan – particularly given the Japanese childhood obsession with designing their own interpretations of popular game and cartoon characters.

But it is the *Pocket Monsters* series – a Japanese phenomenon in itself – that has seemingly monopolised NCL's development resources for the 64DD. *Pocket Monsters* are

essentially Tamagotchi's big brother, and in Japan, *Pocket Monsters* on the Game Boy was not only the biggest-selling game of 1997 (yes, even bigger than *Final Fantasy VII*) but also the biggest-selling Game Boy cart of all time (surpassing sales of *Super Mario Land*). *Pocket Monsters* for the 64DD signals the introduction of perhaps the oddest but most interesting add-on for the 64DD, too – the GB adaptor allowing the connection of up to four Game Boy *Pocket Monster* cartridges to the 64DD via N64 joypads, bringing with it the prospect of realtime 3D battles using original Game Boy *Pocket Monsters* data. With over eight million owners of the 8bit *Pocket Monsters* cartridge in place (Tamagotchis have been miserably relegated to the status of a past fad), 64bit disk-based versions of *Pocket Monsters* must surely be a dream killer app for the 64DD – not to mention a lucrative money spinner.

Another odd piece of hardware launched by Nintendo at the show was its voice-recognition headset and microphone for its forthcoming virtual pet game *Pikachu Genki De Chu*. A stage demonstration revealed an extraordinary game that proved popular with younger members of audience who were invited to speak to the on-screen *Pocket Monster* and rewarded with some great emotive animation. Insulting *Pikachu*, for example, upsets him, sending him scuttling off into the background to play with the butterflies.



Space World '97 was held in Makuhari, outside central Tokyo, in one of the world's largest convention centres



Given *Zelda*'s awesome presence it's debatable just how many delegates noticed the red carpet treatment





NINTENDO スペースワールド '97



F-Zero X (above) and **1080° Snowboarding** (above right), occupied banks of monitors providing ample space for everyone to get a go. Saturday was open to the public, however, and a different story...



Nintendo's Pocket Camera – another Game Boy innovation – proved amusing for those not averse to looking monochrome

But while Nintendo's overall software and hardware lineup was replete with fresh ideas and original content, the thirdparty software lineup continues to look horribly undernourished. With legions of second-rate clones making up the thirdparty assault, there seems to be little improvement on last year's efforts. **Edge** bumped into Argonaut's Jez San at the show who offered some opinions as to why this is the case. 'Very few thirdparty developers are actually working with N64,' he points out, 'and this is partly because development systems are hard to come by, and partly because publishers willing to take the risk are hard to come by. So if you can't get a deal to do a game for Nintendo itself there's little point developing an N64 game because it will be very tough finding anyone else to publish it. Also, N64 isn't exactly an easy machine to develop for because it's cartridge based which means that you have to spend a lot of time working out how to make the game fit into the cartridge, on top of the time it takes you to figure out how to make a good game.'

Is there light at the end of the tunnel? Nintendo of America's VP of marketing **George Harrison** reckons so, and argues that the obstacles to thirdparty success are diminishing. 'I think we were probably not as good as we could have been at providing them with technical support early on,' he explains. 'At the time of N64's launch we had our "dream team" strategy and we really narrowed down the group of people who were given an early look at the machine

and given the early support that they needed. And even some of these people struggled. Even now, as we expand our support to a larger universe of licensees, we've not had all the technical support in place to do that. Besides,' he concludes, 'some licensees have more expertise and resources than others, and it's a challenge for many people to match the time and dollar investment that Nintendo puts into its own titles.'

Certainly, recent cuts in N64 cart costs have prompted more thirdparties (with heftier budgets and more expertise) to sign up, but it's too early to see the results of this just yet.

Nintendo chairman Hiroshi Yamauchi's annual address to the Japanese videogame industry is always a highlight of Space World – if only to be amazed how it can take a whole hour to make about five minutes' worth of points. But if delegates could keep their eyelids from drooping, there were not only messages for the industry as a whole but ones that naturally help to increase Nintendo's market share, too. 'Overseas, Nintendo 64 has been highly regarded. But in Japan, the feedback hasn't been as good as anticipated,' he began. Delegates shuffled their feet and averted their gaze, as if each anticipated a personal verbal battering to come. 'Perhaps some people think it's because there aren't enough games released,' Mr. Yamauchi pondered, 'or maybe people say it's because there are no roleplaying games.' He paused, then he dropped his bombshell. 'In fact, the [Japanese]



For those who could stay awake throughout, Hiroshi Yamauchi's annual address reiterated the N64's familiar 'quality over quantity' motif and described the *Pocket Monsters* phenomenon



This November's revamped Space World exhibition was arguably the finest in recent years, featuring a combination of top-quality home-grown titles and quirky new hardware add-ons such as the Pocketa Camera (centre top). Only the best-behaved kiddies (right) got to attend on the trade-only day

videogame market is no longer driven mainly by TV-based console games,' was his diagnosis. 'The recent videogame console market is losing momentum,' he warned, 'and naturally it's because of too many boring or too complicated software, that ordinary users can't enjoy playing.' He went on to conclude that, 'Such games are flooding the market.'

And his prescription for how the videogame industry should get out of this fix? Two things: one, learn from the record-breaking success of the Game Boy's *Pocket Monster* series; and two, when it comes to releasing console games, it's quality not quantity that counts. Western gamers will be forgiven for feeling a distinct sense of déjà vu at the latter remark and also for raising an incredulous eyebrow at Mr. Yamauchi's grim view of the videogame market. Particularly when it could be argued that the *Pocket Monsters* phenomenon is little more than a spectacular but typically Japanese short-term fad which has given a much-needed boost for Nintendo in an otherwise tough year. But Space World is a show aimed for the Japanese market (despite the west's tendency to view it as a barometer for Nintendo's fortunes around the world) and Mr. Yamauchi was addressing specific Japanese needs and problems. As for the 'quality not quantity' mantra, there's both value in what he says and a need to take this stance, given the continued lack of third-party support for Nintendo 64.

Can *Pocket Monsters* succeed the outside of Japan? 'We hope so,' admits George Harrison. 'We're going to make an effort to bring it to the US on Game Boy in late 1998. It involves

not only a large effort to translate the game itself, which is of course a roleplaying game, but also an effort to simultaneously bring together all of the elements that have made it successful in Japan, including a TV show and all sorts of merchandising elements that turned it from being just another game into a complete phenomena.'

In all, Space World '97 was an interesting show – perhaps the best in recent years. And while Mr. Yamauchi may be looking to *Pocket Monsters* to keep him smiling in 1998, western gamers have at least four cracking new Nintendo 64 games to look forward to, and maybe even the 64DD. But for that, all eyes will be on June's E3.

E



The excellent *Yoshi's Story* was a big hit with young and old alike, but for those not quite sure what was going on, help was at hand...

Space World '97 lineup

Playable Nintendo-developed titles

Legend of Zelda: Ocarina of Time

Yoshi's Story

F-Zero X

ClayFighter 63 1/2

Sanjio & Kazuo's Big Adventure

100% Snowboarding

NBA Basketball

Non-playable Nintendo-developed titles

Phantom Thief

Mario's Active series

Talent Maker

Polygon Maker

Picture Maker

Pocket Monster Shop

Pocket Monster 64

Pocket Monster Stadium

Mother 3

Super Mario RPG 2

Angie Empress Leo

Sim City 64

Third-party playable titles

Bio-Terris (Atari)

In the Zone (Konami)

Negaro (Konami)

Gap (Konami)

Aero Gauge (Atari)

Kiratto Kaikoku (Imagineer)

64 Ozamo (Bentley Up)

Soak Wings Assault (Video Systems, Inc. Tokyo)

Super Robot Spirits (Banpresto)

Champion (Taito)

Augusta Masters (TAE Soft)

Lamborghini 64 (Rust)

Top Gear Rally (Midway/Namco)

Gresky's 3D Hockey (Midway/Namco)

Grizzly 98 (Midway/Namco)

Extreme-9 (Accolite)

ClayFighter 63 1/2 (Interplay)

Extreme-9 (Accolite)

NFL QB97 (Accolite)

FFA Road to Victory 98 (EA)

Farmista (Namco)

Dual Heroes (Midway)

Denryu Irena Bou (Hudson)

Pachinko 3rd Days (Sera)

Tamagotchi World (Bandai)

Monta Shog (Sera)

Pro Yakyu King 2 (Imagineer)

Elaine (Imagineer)

Snow Speeder (Imagineer)

Sim City 2000 (Imagineer)

Fighting Cup (Imagineer)

Wild Choppers (Sera)

Rev Limit (Sera)

Space Circus (Imagineer)

Sim Copter (EA/Namco)

DURAL DETAILS DIVULGED

While the Saturn struggles through what many regard its last Christmas as a credible force, interest in Saturn 2 (or Dural, to use the console's development name), grows ever stronger. Unsurprisingly, the Internet has yet again proved a hot bed of speculation and, very occasionally, information about Sega's plans. Beyond the intense circle of gaming fanatics always on the lookout for the Next Big Thing, evidence of the growing support for the machine can be found in the list of companies that are thought to have Dural products in development. Those rumoured to be working on titles include Shiny, Adeline, Visual Concepts, id, EA, Climax, Core and Warp.

More concrete is the news that Sega will not be converting any of its current arcade games to Saturn 2. Although an early build of *Scud Race* is apparently being used to demonstrate the potential of Dural to developers, Sega will not be releasing the game. The company feels that by converting only arcade titles that are cutting edge at the time of Dural's release, the machine will be perceived in the same light. With the Model 3 sequels of both *Daytona USA* and *Sega Rally* now confirmed as being in production, it is highly likely that Sega will be using at least one of those games to launch

with the new console. There are less definite murmurings of a 'Racers MegaMix' title, in a similar vein to the superlative *Fighters MegaMix* already released for the Saturn. It would make sense for Sega to create such a title for Dural, as it would allow the company to profit from its racing game heritage without loss of face in the next wave of hardware wars.

It is perhaps an ill omen that some industry figures already have reservations about Dural. One very respected source, who wished to remain anonymous, told **Edge** that, 'Dural is a nice piece of hardware. It's exactly what you would expect it to be, bearing in mind the PowerVR boards that will drive it. The twin operating systems allow for easy ports and plenty of advanced development, as developers are, of course, all familiar with Windows. The only problem with it at this point is that there are no real surprises, no innovation – nothing that really blows you away.'

'What the industry needs now is a system that introduces a new way of controlling the game, or a huge leap in graphics technology – something that will drive gaming forward. I don't see that with Dural, at least not yet.'

Given the impressive specs confirmed to date (see news, **E52**),



Sega is wooing developers with a Dural version of *Scud Race*, although it is thought the game will be replaced by *Daytona USA 2* for the launch

Edge will be withholding its own judgment on the machine until more specific details emerge.

With Sega's annual reports revealing a year-on-year fall in worldwide revenue of 63.3%, the chances are that those details will become available sooner rather than later.

E



The Dural name, taken from Sega's *Virtua Fighter* series, is likely to be altered prior to the console's launch



Cutting Edge Cuttings

Eidos' double whammy

Who said lightning never strikes twice? Eidos Interactive has confirmed that with first weekend sales of over 50,000 copies, *Tomb Raider 2* has passed *Final Fantasy VII* to become the fastest-selling PlayStation game of all time. In a neat link, Eidos also announced that it has secured worldwide publishing rights for the PC version of

Square's blockbuster RPG. Given that the language translation process has already been undertaken, a fairly swift release is expected.

Bad karma

In an ironic twist of fate, 1,800 copies of DMA's criminal car caper, *GTA*, were stolen from a packaging plant in Wednesbury, West Midlands,

on the night of December 1. No one was injured in the incident, and one of the perpetrators was in fact apprehended the following day, whereupon 700 units were recovered.

Roll on Zelda...

According to which report in the Japanese press is to be believed, the PlayStation is outselling the

M2 RESURFACES IN NON-GAMING GUISE



Once a console with revolutionary specs, now almost certain to follow the same dubious road of previous multimedia machines such as Philips' CDI



Despite being a CGI-based event, the annual show attracts some major videogame manufacturers

This year's Digitalmedia World Expo in Tokyo saw the unveiling of Matsushita's M2 machine with some indication at the direction in which the company expects the previously scrapped console to follow. The yearly event, which ran from November 26-28, allows the opportunity for companies to hold a series of specialised conferences on CGI technology and to exhibit their latest creations.

Matsushita, Panasonic Wondertainment's sister company, had five M2 units on display despite the firm's failure to officially announce the machine so far. Surprisingly, two of the three of demos shown were games. Of the two, the most impressive title was a dolphin game (similar to SCE's *Depth*), whose realtime visuals were particularly fluid, boasting superlative transparency effects. The animation of the water-bound mammal was also commendable and its control was handled via the analogue control of the joystick. The other game, *Memory Breaker*, is a scrolling shoot 'em up that was being played by staff members. *Digital Dance Mix Namie Amuro*, a karaoke title, completed the trio.

According to a brochure detailing the system's specifications, M2 is to be marketed as a multimedia machine, with six main uses: 3D industrial imaging, real estate simulation, exhibition presentations (utilising the hardware's MPEG1 capability),

interactive orientation, virtual reality simulation, and educational purposes (such as school installation). According to the company, the purpose of the games displayed at the show were to demonstrate M2's processing power. There are currently no plans to release recreational software.

Furthermore, the machine can be connected to a LAN network and allows a keyboard to be plugged in. Matsushita Interactive Media was marketing its services to support any development on the M2. No mention was made regarding the use of M2 technology in the arcade market.

The show also attracted an odd mixture of exhibitors. Electronics giants like Toshiba, present to show off its latest MPEG camera, shared floorspace with a number of videogame companies such as SquareSoft, which showed its latest CGI movie of *Parasite Eve*. Similarly, Namco was present and



The dolphin game was the most impressive M2 software title on show, yet it will not be released

held day-long conferences chaired by CG designers from the development of the *Tekken 3* and *Ace Combat 2* CGI films as well as the motion-capture techniques used in the former's production. Curiously, the company also chose to officially unveil the specifications of its System 23 arcade board.



Having failed to gain developer support as a games machine, Matsushita has decided M2's custom chipset should be taken in another direction

N64 by between ten and three to one. The lack of RPGs for the Nintendo console is undoubtedly damaging its prospects, although *Zelda 64* should even out the ratio. In a related story, Japanese cartridge prices have been reduced to between ¥5,800 and ¥6,800 at retail – around £30. Older games have been cut even further, to the point where *PilotWings 64* can be snapped

up for ¥1,690 (£8). Edge would be interested to see how Japanese punters reacted to Turko's original UK price of what equates to ¥15,000.

Liverpool welcomes 3D sound

Psygnosis is the latest in a string of companies to announce its intention to utilise Aureal's A3D sound technology. A3D simulates '3D' sound

from only two speakers, and has already featured in PC titles *Jedi Knight* and *Heavy Gear*. Other developers linked to Aureal include EA and GTI.

Hardly the sincerest form of Battery

Just as NCA is shik-ing out against the Game Doctor N64 software copier, details have emerged of another such device. Created by

Greta Taiwan Inc., the Mr. Backup Z-64 uses Iomega's low-cost Zip drive technology to make 'back-ups' of N64 carts. Expect more lawsuits from Nintendo soon.

DT, SCEA, EA and 3Dfx, too

The talented co-founder of EA Sports, Don Truog, has left the company to set up his own

RPGS PREPARE TO SWAMP PLAYSTATION



Square's tactical RPG *Front Mission Alternative* (top), and *Chocobos* (above) were on show

RPGs are making a comeback – and the PlayStation is their developers' platform of choice. That was the overwhelming message at the recent PlayStation Club Festival, which took place on November 15-16 in the Makuhari Messe exhibition centre, Tokyo. Amid the brouhaha surrounding Nintendo's Space World event (which took place in the same building), it would have been easy to lose sight of the Festival, which is primarily targeted at members of the PlayStation fan club. Organised in association with four major PlayStation magazines, the main aim is to showcase the forthcoming Christmas releases for the format.

Of the RPG producers, SquareSoft was obviously the largest and most prolific, wading in with *Xenogears* (see p45), *Chocobos no Fushigi na Dungeon*, and *Front Mission Alternative*, which is a simulation-oriented RPG. Still riding high on the tidal wave that was *Final Fantasy VII*, Square appears to be throwing its weight behind the PlayStation with renewed vigour.

Tales of Destiny, Namco's update of its famous SNES *Tales of Phantasia* series, was shown in its latest incarnation, while Konami announced *Azure Dream Other Life*, which features multiple storylines. SCE confirmed its



In a triumph of co-ordination, the PlayStation Club Festival moved on to a further four destinations after running for two days at Makuhari Messe

intention to update *Crime Crackers*, which was the PlayStation's first RPG back in 1994, although the sequel appears suspiciously similar. Nihon System, creator of *Chameleon Twist* for the N64, made a noteworthy entry into the fray with *Ancient Roman*. This title is very much of the new school, with 3D characters, CGI settings and action-oriented battle. T&E Soft's *Blaze & Blade* was also promising, and supported Sony's multitap for fourplayer action.

Given the deep-rooted Japanese penchant for RPGs, Edge has to wonder whether the N64 will ever be really popular in its home territory.

Other genres, while not overwhelmed by the same quantity of interesting announcements, were well served. Racing game fanatics were treated to both a near-complete version of SCE's fabulous *Gran Turismo*, and the upcoming Japanese release of *V-Rally*. HudsonSoft dominated the fighting game arena with *Bloody Roar* (see p92), and its *Bomberman World* was the best action game at the Festival. Capcom's Rockman (aka Megaman) made yet another appearance in the form of *Rockman Dash*, while in the wake of Tamagotchi Bandai surprised nearly everyone with *R7M Mystery Hospital*. Attracting long lines of eager players, *Mystery Hospital* features a horror movie atmosphere in a similar vein to *Resident Evil*. Also announced were the inviting 2.5D platformers *Ore Tomba* (see p44) and *Klonoa* (see p46), which will go head to head with *Yoshi's Story* over the coming quarter.

Overall, the PlayStation Club Festival was a confident event, reaffirming the seemingly unassailable popularity of Sony's machine on its home turf.

While there were no major surprises, it confirmed that developers were still finding new ways to push the PlayStation – mainly towards more inventive gameplay.

E



As ever, hordes of eager fans crowded to play preview versions of this winter's biggest titles



team, DT Productions. The first title, an 'action sports' game, is already underway, and is set to be published by Sony on both PC and PlayStation. Traeger's team will be producing both *Direct3D* and *Glide* versions to run on the Voodoo chipset.

Sold Out prepares to sell out

Budget company Sold Out Software is releasing a

range of hit PC CD-ROM games at £4.99 each. The collection, which includes the likes of *Dune*, *7th Guest* and *Creature Shock*, is due to be added to each month, with *Cannon Fodder* and *Screamers* lined up for similar treatment.

Ultima Online goes ultimate online

Origin's multiplayer online RPG, *Ultima Online*,

has become the fastest-selling title in the company's history. More than 65,000 copies have been bought so far and a further 80,000 have been shipped internationally. According to Origin, the servers can support as many as 11,000 players simultaneously, many of whom log on daily and spend around four hours online per session. Anoraks unite...

No mail migration

The Australian Office of Board Classification has judged that *Take Two Interactive's* controversial title *Postal* is excessively violent and issued a ban on the game's sale in Australia. This should come as little surprise to the publisher in the light of last year's tragic killing of 35 people in Tasmania by a lone gunman.

NET YAROZE 1ST ANNIVERSARY GAME COMPETITION

Sony gear up for grabs in first anniversary celebration

In association with **Edge**, and in celebration of the first anniversary of Net Yaroze's availability in Europe, Australia and New Zealand, Sony is offering prizes to successful entrants in an exclusive game creation competition.

The first-prize winner will receive a state-of-the-art Sony digital camera, the second-prize winner a Sony MiniDisc Walkman, and the third-prize winner a Sony shoulder-mounted speaker system (for use with music systems and, most effectively, PlayStation games).

How to enter

Only SCEE Net Yaroze Members may enter.

Entrants must send a completed application form from **Edge** (see below) to: 'Net Yaroze 1st Anniversary Game Competition', SCEE, Waverley House, 7-12 Noel Street, London W1V 4HH.

Alternatively, print and fill out the equivalent form from the News section of the official Net Yaroze Members website on the Internet (<http://www.scee.sony.co.uk/news/>) and post it to the aforementioned address.

Judgment criteria

The judging panel will be reviewing entries based on both technical and creative content.

Entries can be games of any genre.

Important dates

The competition opened, via the Net Yaroze website, on November 25, and the closing date for entries is March 12, 1998.



Entrants are advised to study the standard of the wide array of existing Net Yaroze demos



FIRST PRIZE Sony DSC-F1 digital still camera

The DSC-F1, featuring a realtime LCD viewfinder, shoots 640x480-res shots which can then be digitally manipulated. Plus one year's free subscription to **Edge**



SECOND PRIZE Sony MZ-R30 MiniDisc Walkman

The MZ-R30 offers 74 minutes of stereo recording (148 in mono), easy editing functions, and up to 15 hours playback. Plus one year's free subscription to **Edge**



THIRD PRIZE Sony SRS-GS70 shoulder speaker system

The SRS-GS70 features a built-in 2W amp, and sits on the user's shoulders offering near-field sound reproduction and vibration. Plus one year's free subscription to **Edge**

Net Yaroze 1st Anniversary Game Competition

Member's name: _____

Address: _____

Post code: _____

Country: _____

Daytime tel. no.: _____

Evening tel. no.: _____

Email address: _____

User ID: _____

Date membership commenced: _____

Age (as at March 12, 1998): _____

I agree to the rules and regulations of the Net Yaroze 1st Anniversary Competition

Signed: _____

Date: _____

Rules and regulations

Entry is open to SCEE Net Yaroze Members, excluding all employees of SCE PAL territories, or of **Edge** magazine, their families or agents, or anyone connected with this competition. Application forms for entry should be sent by post to 'Net Yaroze 1st Anniversary Game Competition', SCEE, Waverley House, 7-12 Noel Street, London W1V 4HH. Application forms must not be received later than March 10, 1998. Entries must be received by March 12, 1998. Competition entries must be placed on the Members Home Page. Entries which are not in accordance with the rules will be disqualified. Only one entry per Member. The language used in entries must be English. Entries must be created using Net Yaroze PlayStation libraries only and created by the Member named on the application form. Entries must not contain copyright material of any third party. Copyright is the property of the Member subject to any SCEE or other rights incorporated in them. The judges' decision is final. Winners will be notified by email within two weeks of the closing date. A list of winners and their country will be posted on the Net Yaroze website on the News page and will also appear in **Edge** magazine. No correspondence will be entered into concerning the results of the competition. The prizes are as described above and are not transferable; there will be no cash alternative, although in exceptional circumstances SCEE may offer prizes of a similar cost value in substitution. Names and photographs of the winners may be used for publicity purposes. Please retain a copy of these rules for your own information. Product titles, publisher/developer names, and brands and associated imagery and/or trademarks are copyright material of their respective owners.



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(out there)

REPORTAGE FROM THE PERIPHERY OF THE VIDEOGAMES INDUSTRY

How to get undead in advertising

Zombies running riot in a gothic mansion. Skewed camera angles. Constant shocks. Gross special effects. It is easy to spot the influence of George Romero (right) on Capcom's hit title *Resident Evil*. Indeed, if it were a film, the game would not look at all out of place alongside Romero's classic 'Living Dead' trilogy.

With this in mind, Capcom decided to acknowledge its debt to the master of the undead by employing him to direct a TV ad for *Resident Evil 2*. The ad, which cost ¥150,000,000 (approximately \$1.2m) to make and took just two days to film, features the game's heroes, Leon and Claire, running through the Raccoon Police Department followed by hordes of zombie cops.

The highlight of the whole affair, however, appears to be the make-up designed by cult SFX guru Screaming Mad George. Judging by the plethora of gross-out effects in the ad, the man has not lost his touch since working on 'Society', a film which witnessed Billy Warlock (of 'Baywatch' fame) turning someone inside out with his fist.

The ad is due to make its Japanese TV debut later this year, but is unlikely to get past the UK's zealous censors. Do not fret, however – according to Capcom's Tad Yamaguchi, a German film company has recently bought the motion picture rights. **Edge** just hopes they don't use any of the dialogue from the original *Resident Evil* cut scenes. Even Romero wouldn't be able to stop audiences the world over from rolling in the aisles at such classics as 'You were almost a Jill sandwich!' and 'It was all I could do to... stay alive.'



EDGE SINGLES OUT THE WINNERS AND LOSERS IN THE INTERMINABLE BATTLE FOR VIDEOGAME CRED

(game on)

The **delicious irony** of the West Midlands company preparing the packaging for BMG's *Grand Theft Auto* being ram-raided – and losing 1,800 copies of the game. Life really does imitate art.

Japanese **photo sticker** booths, which allow users – usually giggly girls – to be photographed on sickly cute backgrounds for sets of passport-style photo stickers. **Edge** enjoyed these far more than it should have on its recent Tokyo jaunt. (The sticker booths, that is.)

Namco's **Final Furlong** coin-op. One of the only games that's more fun to watch others play than to indulge yourself. Just. Who would have thought a horse racing sim could be such a hoot?

The **Christmas software selection**. Okay, there are definitely some cynical marketing moves afoot here and there, but this yuletide must represent one of the best ever for gamers.

N64 beat 'em ups – just what is the problem? *Killer Instinct*, *War Gods*, *Dark Rift*, *Clay Fighters 63 1/3* and now *Mace* – not one of them has been even a patch on the *Tekken* series. Capcom, hello?

The **Carmageddon Special Edition**, which includes a T-shirt, key ring, mouse mat, sticker and – wait for it – an individually numbered certificate. Don't all rush to the shops at once.

The **lifestyle press's knowledge of videogames**. Have you noticed how every mag and its dog has jumped on the videogaming bandwagon and has its own special little videogaming page/column? Oh, and how utterly, painfully, pitifully worthless their advice is?

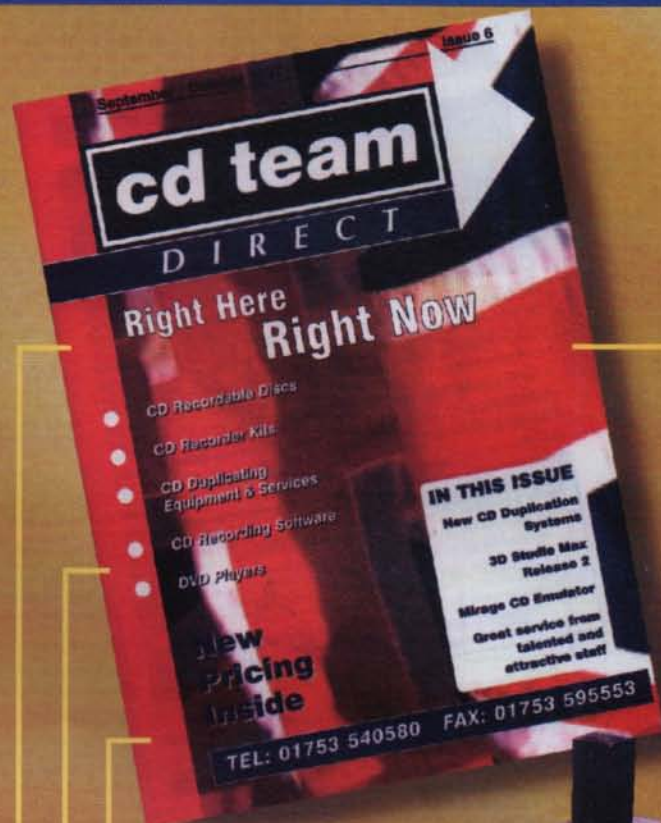
M2, for finally showing its face as... a... multi... media... machine. **Edge** wonders just how many die-hard 3DO loyalists will go out and buy one of the things on import regardless.

Dave Perry, for being one of the unluckiest victims of house robbery ever. A thief recently raided his home and made off with his Nintendo 64, PlayStation, and all his software for each format. His Saturn and Virtual Boy were both left strangely untouched.

(game over)

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CD-ROM

E

Discoveries

Encarta used to have a monopoly on the interactive encyclopedia market, but now that the concept of multimedia has become more familiar, the demands of education-hungry PC families are increasing. 'I've forked out two grand for this thing,' goes the parental mantra, 'and now it's going to teach my child something – other than how to kill someone with a nailgun.' *Discoveries* does at least take a new angle on a familiar theme. This is not an encyclopedia in the Encarta sense – it is more an immense trundle through history, an interactive time line, taking in the every major event and presenting it in an easily digestible form.

Searching the database of information is impressively easy. Once installed, the user is introduced to the Time Gallery; a long corridor flanked on either side by scenes from different periods of history ('Building the first pyramid', 'a Medieval town', 'The opium wars', etc). This gallery can be explored using the arrow keys rather like a firstperson shoot 'em up, and when the users come to a scene which looks interesting they can stop, press Enter and investigate further.

Next comes the 'Eye opener' section. This is essentially a large picture representing the period of history chosen which the user can scroll around to get a closer look at various elements. Certain sections of the image can also be clicked on to produce commentary. All very user-friendly.

The meat of the product, however, lies in the Time Screens, which are selected from a pull-down menu at the top of the screen. These are collages of pictures and text again relating to the period in question, which can be enlarged and/or printed out at the click of a mouse button. The information contained here is often incredibly concise, but there is enough to give the reader a feeling for the event. The collage representing the breakout of the first world war, for example, manages to cover the assassination of Arch Duke Ferdinand, the race for African colonisation, and the unstable alliances of the day.

Interestingly, though, there are many ways to pilot through the incredible four discs of information. Users can choose to peruse *Discoveries* by date using the Time Gallery, by Geography using the world map, or by themes like Art, Religion and Science. There are also bookmark and notepad options. Ultimately, though, *Discoveries* is competent rather than epoch-making, with a wide breadth of knowledge but rather lacklustre presentation. No doubt *Discoveries* will provide an invaluable start-point for GCSE-level historical research, but little else beyond that.

Published by IBM WorldBook

£50

Developed by Liris Interactive

Out now, PC CD-ROM and DVD

Games & entertainment, since 1945

on movies

Lee was the most renowned star of Chinese martial arts (kung-fu) films. An overall film audiences began to decline in the 1960s, mainly as a result of competition from television, certain types of films, particularly action movies, had to be popular with the mainstream public.



Music

E

DJ Shadow
Cameo (back beat) remix
Q-Bert Mix



Camel Bob Sled Race' is a collaboration between experimental genius DJ Shadow, the enigmatic figure behind 1996's groundbreaking 'Introducing', and mixing supremo DJ Q-Bert, DMC world champion '92-'95.

Seven of Shadow's best tracks are redefined and further remixed here to create 25 minutes of pure scratch and hip-hop excellence.

Q-Bert reinterprets Shadow's style with a raw and relaxed approach yet the praise must still be given to Shadow whose innovation and quality vinyl stockpile ensured the fine basis.

A wise way to spend the Christmas cash.

Platinum Breakz II

Various



Goldie's Metalheadz label presents the second instalment to the Platinum Breakz collection, the round up of the last 18 months of the most club-worthy, hard-hitting drum'n'bass.

The most recent 12-inch releases are all featured as well as some previously unreleased cuts including the mighty Dillinja's 'Promise', a dreamy vocal Goldie-esque roller, 'Swift Glide' by Optical, an intense tune collaborating dark tones with sonic beats features on the other end of the album, while in between lie some classics, the ever-popular 'Metropolis' by Adam F, the tough, dark-hued 'Raven' by Ed Rush, and the awesome 'Your Sound' remix by J Majik.

Gadgets



Sanyo CDP-900 personal CD player

Personal CD players have, in the past, been next to useless. Trying walking while listening to one – let alone jogging – and chances are you'll hear no more than a tenth of the disc, it'll be skipping that much. This was countered to a certain degree by the inclusion of small amounts of memory in such machines, so that a track could be read ahead by around ten seconds, with any potential skips negated by the memory buffer. However, even ten seconds wasn't really enough, especially for in-car use, so manufacturers started adding more and more memory.

Sanyo's latest model, the CDP-900, uses more memory than any other currently available portable CD solution, with no less than 40 seconds' worth of music being read ahead in order to counter skips. A marvellous piece of kit, this will even put up with the likes of bumper-car rides and short bursts of sprint. As well as being capable in terms of preventing skips, it also sounds extremely good – as good as any other £200 system. Shame it doesn't look as special as it might, but then whoever said you could have everything?



● £200

● Out now

● Sanyo, tel: 01923 246363

MS702 Sharp MiniDisc

MiniDisc is already a popular format in Japan, and new personal MD players are released with amazing regularity. This latest model from Sharp follows the current trend for players to be only slightly bigger than the discs themselves – something made possible by the inclusion of a slim rechargeable battery instead of the usual pair of chunky AAs.

Arguably the hippest model currently on sale, the MS702, and its non-recording and slightly slimmer cousin, the SS302, benefit from front-loading, a slick headphone-style remote (with luminous blue back light for added pose value), and some really rather splendid bassy sound. The best-looking mobile sounds you can (almost) buy.



● ¥38,000/30,000 (£190/150)

● Out now (Japan)

● UK release: TBA

CD-ROM



Sightings UFOpedia

The post-'X Files' obsession with all things alien seems to continue apace. Countless UFO magazines and 'unexplained mystery' programs now clutter the media, and hardly an ad break goes by on TV without some moronic spoof on the exploits of Mulder and Scully. It's predictable then, that CD-ROM publishers would clamber aboard this unidentified flying bandwagon in great numbers.

Sightings is one such cash-in. Based around the hugely popular US TV series of the same name, the disc seeks to offer a comprehensive guide to 'UFOlogy', taking in everything from Government cover-ups, eyewitness accounts, animal mutilations and alien abductions. There is even a large database of sightings which the user can peruse, narrowing down the search by entering the year, site, and type of phenomena. This database is accompanied by an Internet link which promises to periodically update the information on the disc: a smart addition in this age of interconnectivity.

In basic terms *Sightings UFOpedia* is pretty comprehensive. All the bugbears of the UFO world – Area 51, the blue room, Roswell, etc – get a mention, and the narrative does try to take a global perspective, despite the obvious US origins. Most interestingly, though, the developer has attempted to present a balanced case and mentions many of the hoaxes and alternative explanations which could easily account for most UFOs.

While this is not quite the exhaustive encyclopedia of UFO research it claims to be (most of the sections do little more than whet the readers appetite for deeper analysis), there is plenty here to introduce the laymen to a fascinating subject.

● Published by Anglia Multimedia

● £30

● Developed in-house

● Out now; PC CD-ROM



Sawtooth

Jonny L

XL Recordings



With the drum'n'bass scene having exploded in the past year, it's tough for musicians to make the grade these days – particularly when one Mr. Size has put out one of the year's most imaginative albums in 'New Forms' and scooped the Mercury Music Prize. And that's the problem an album like 'Sawtooth' faces. Jonny L might be a skilful technician when it comes to composing moody, razor-sharp beatscapes ('Piper', 'S4') not to mention some delightful Bukem-style ambience ('Tychonic Cycle'), but the result is an album occasionally clinical in its execution.

Total Science 3

Various

Merca



The third in the high-quality 'Total Science' series is a shockingly diverse and melodic collection. Showcasing emerging talents like Flytronix and E-Z Rollers while still finding time for tracks from stalwarts like Omni Trio, the 14-track set is by turns funky, drifting, dub-heavy and pounding. Strands of jazz, techno and everything between are touched upon in the search for new flavours. Displaying all of the technical refinement associated with the genre, but without the clinical sound that normally goes with it, 'Science 3' is the sound of a scene that just gets better and better.

Video



Double Dragon

Making a movie out of a videogame is an endeavour surely doomed to failure every time. Videogames, as any fool knows, are about the visceral thrill of interaction; a consideration such as a plot, which is vital in motion pictures, is rarely important. Unfortunately, the few games in which they are important – Monkey Island, Broken Sword, etc – are never the ones that get converted into films.

So, following on the heels of 'Street Fighter: The Movie' (unmitigated disaster) and 'Mortal Kombat' (absolute shambles), comes another beat 'em up favourite, 'Double Dragon'. Here, two brothers have to protect their half of a powerful talisman from an evil tycoon (Robert Patrick from 'Terminator 2' – oh how the mighty fall) who wants to unite the sections and gain incredible magical powers. Much martial arts shenanigans take place, and there's a kind of Power Rangers-style knockabout humour throughout which gives you an idea who this film is pitched at.

In brief, terrible acting, a script which was clearly made up as the film went along, and a set of characters less likeable than the E Coli virus.

● Directed by James Yukich

● Cert 12

● 92 mins approx.

● £11

● Out now



Books

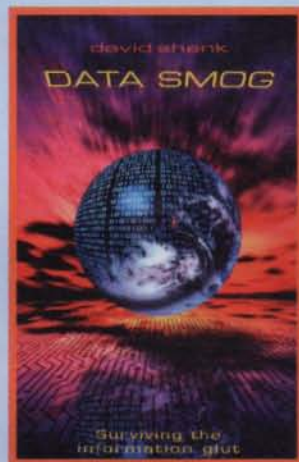


Data Smog

Information [was] once rare and cherished like caviar', goes one of the 13 laws of Data Smog that begin this cautionary tome, 'now [it is] plentiful and taken for granted like potatoes'. What follows is a guide to how one can avoid being overloaded by the giant King Edward Information has become.

The premise at the centre of this polemic – 'at what point does the information we control begin to control us?' – is provocative and certainly well argued. For example, Shenk points out quite accurately that, 'Data Smog gets in the way; it crowds out quiet moments, and obstructs much needed contemplation. It spoils conversation, literature and even entertainment'. To him, information is eye-candy; TV needs to be kept in check lest it turn children into channel-hopping zombies.

Somewhere along the line, though, the author begins to lose the plot. The information-overload-avoidance tips are helpful at times, but the 'be careful or data is going to kill you' tone has a hint of luddite hysteria. Sure, technology can be a powerful drug, but most are keen to take what they need from the digital age and leave it at that.



● David Shenk

● Abacus Press

● £10

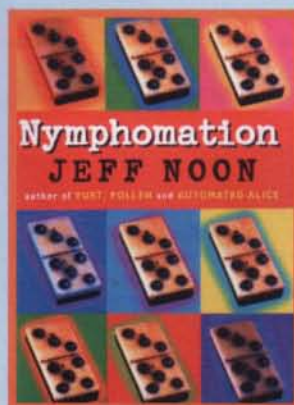
● ISBN 0-349-10948-6

Nymphomation

Cyberpunk fiction is generally ripe with intriguing ideas, but Jeff Noon's unique variations on the genre have always been filled to bursting point. Nymphomation – where information has sex and produces Baby Data – is no exception.

In many ways, this is a prequel to Noon's previous works, 'Vurt' and 'Pollen'. Here the reader learns about the early evolution of Vaz and the Vurt feathers, and there is a similar mix of eclectic characters and baroque narratives. 'Nymphomation', though, takes these familiar images and themes, and brings them up to a near-future Manchester where dominoes is the new National Lottery and the whole population – beggars, DJs, mathematicians and all – is hooked.

The use of an archaic game as the focal point of a sci-fi novel is just one inspired touch among dozens of others. Noon's universe is softer and more visceral than many a cyber setting, yet the author is capable of Clive Barker-esque dark visions. Unsettling and at times surreal, 'Nymphomation' is yet more proof that the US does not have a monopoly on authors prepared to toy with very dark technological futures.



● Jeff Noon

● Doubleday

● £16

● ISBN 0-385-408129

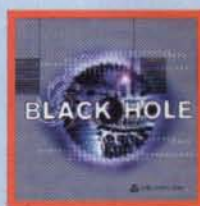
Music



Time Stops Here

Black Hole

Magick Eye Records



No longer flavour of the month, trance music still has much to offer, as demonstrated by this debut from Magick Eye's latest signing. Dark moods are Black Hole's forte, with snatches of John Carpenter movie dialogue and other equally sombre samples spliced between the fast-paced beats and hard-edged acid tweaking. In truth 'Time Stops Here' is about as innovative as most trance, which is to say not very. But the tracks on offer do suggest the band are already finding an individual voice, and may yet find ways to push trance into uncharted territory. Watch this space.

Driving Memoirs

Morgan Geist

Clear



With influences ranging from modern jazz to Detroit techno to '80s synth pop, it's no surprise that Morgan Geist should produce music of such challenging incongruity. 'Driving Memoirs' is a calm, tentative flirtation with techno, often touching the edges of the genre only to draw back again and again into jazz latitudes and experimental meandering. Tracks like 'Linking Tunnel' and 'Flat Out' combine the resonant sleazy bass of Bait Punk with the airy composure of classic breakbeat to great effect. But this seems like an album teetering on the edge of something, afraid to fall.



The rules of Britannia

Riots, organised marches, drunkenness and bare buttocks were probably not on Richard Garriot's mind when he designed *Ultima Online*. Yet so serious has civil discontent become in Britannia that he has issued an open letter on the Internet through his alter ego, Lord British, pleading for greater tolerance of the game's inconsistencies and 'undocumented features'.

The height of public protest was a drunken public gathering at Lord British's castle in the game world. Devised by one Modhri Dragon, the event was carefully orchestrated in order to grind *Ultima Online*'s seven servers down to a snail's pace. Drunkenness, for instance, was encouraged because drunk characters act randomly – a useful way to ensure that characters would remain active once the game slowed down.

In the event, Modhri Dragon called off his protest, reportedly after receiving a death threat from a fellow player. But a scaled-down protest did take place – and at least one official game character turned up to egg on the crowds, even granting them entry into Lord British's throne room. Fortunately, the king was elsewhere. Origin staff were said to be happy that the protests happened wholly within the game, claiming it was another indication of the game's immersiveness.

The protestors haven't articulated exactly what their grievances are, other than a general feeling of unhappiness with its performance. It's true that both the game's success and the number of

problems which have arisen seem to have taken Origin by surprise. Many beta testers had warned it wasn't ready for public consumption before it went online, and indeed more than 3,000 bug fixes have been implemented since then.

Protests like these prompted Garriot, as Lord British, to issue a request for calm. He acknowledged many of the concerns (including lag, bugs and player-killing) but argued that Origin was fixing things as fast as it could.

'What, citizens of Britannia have asked, have we been doing?' said Lord British in his letter. 'As you might suspect, an endeavour of this magnitude has not gone on without a hitch. One of the reasons is that, unlike anything that has gone before, this world never stops changing. Many of the concerns would be easier to remedy in a oneplayer game, but they become far more complex in a massive multiplayer universe.'

Most of the grievances will be familiar to anyone who has played a non-commercial MUD. Player-killing by other gamers has long been an issue, and hacking has affected every game from the first MUD to *Diablo*. But by creating such a compelling world, Origin has raised expectations. Charging £40 for the title and another \$10 a month subscription has had an effect too.

Cynicism aside, Garriot claims that over half of *Ultima Online* purchasers visit Britannia every day, with most staying for three or four hours. It's clearly a world people care for.



Nobody, except perhaps New Labour, believes in Utopia anymore. So perhaps it's unsurprising that Britannia has fallen prey to the imperfections that have plagued every planned civilisation, from the Roman Empire to the USSR. Such historical accuracy might be the highest accolade yet for Origin's labours

Ultima Online is published in the UK by Electronic Arts. Call 01753 546465 for more details. For more information about *Ultima Online*, visit <http://www.owo.com/>

A pig of a game

While the UK economy is scourged by fat cats, the United States has its corporate pigs. Now a new company, the Online Interactive Network Corporation (or OINC for short) is seeking to 'leverage' the epithet, offering players the chance to enslave their fellows in its new financial game *Piggyland*.

The main aim in *Piggyland* is for players to swindle their way to the top of the economic ladder, initially selling their services as a 'grunt' to other players and non-player pigs. Soon, though, they accrue the financial muscle to trade in favourite porcine goods like bricks and straw (sadly, pork scratchings will not be available to commodity brokers).

It all looks very bizarre. At this stage in development it's hard to say if *Piggyland* will appeal to anything other than the novelty online market. **Edge** doesn't believe in rash(er) judgements.

The *Piggyland* experience is expected to go live in early 1998. To sign up as a beta tester, visit <http://www.piggyland.com/>



E-On off

The UK online games publisher E-On has ceased trading. The latest casualty in the battle to make money from what's commonly claimed to be the future of gaming, E-On's failure to acquire the Sega channel was cited as a major reason for its untimely end. The company, which hosted single and multiplayer games across the Internet, was rumoured to be looking for some £6m to fund further developments.

THIS MONTH...
 ● RARE PEGS IT
 ● MONSTER MUCH
 ● NINTENDO PROFIT

EDGE HITS SPACE WORLD AND CATCHES THE RARE TEAM UNAWARES BEFORE INDULGING IN AN UNPRECEDENTED SPENDING ORGY ON CONSUMER ELECTRONICS, WHILE ENIX JUMPS ON THE POCKET MONSTER BANDWAGON AND NINTENDO'S PROFITS STAND TALL IN THE ASHES OF THE TOKYO STOCK EXCHANGE

'They're from Edge! Duck!'

Edge's recent trip to Japan for the Nintendo Space World Expo gave it the chance to spend some serious shopping time in Akihabara, the world's consumer electronics Mecca. The day of arrival in Tokyo happened to coincide with the keenly anticipated launch of *Diddy Kong Racing*, so Edge wasn't altogether surprised to stumble upon a deputation from Rare. But the team behind the game, keen to preserve their anonymity, declined to be photographed in front of a crowd of fervent Japanese *DKR* players – unless it could call home first to check if it was okay.

Most of the shops in Akihabara are electronics stores selling hi-fis, personal stereos and virtually anything that plugs into a wall or runs from batteries. And because the exchange rate is so much more favourable than in previous years, bargains are easy to come by. Edge picked up a new Sharp front-loading MiniDisc player (see page 19) for ¥38,000 (£190), and a decent Sony DiscMan with optical digital-out for ¥9,500 (£45). Searching further afield can yield even greater bargains. A second-hand camera store in Shinagawa was the place to pick up a Panasonic DV1 digital camcorder for an astonishing ¥65,000 (£325). Edge took great pleasure checking out the same model on sale in its local Dixons for a rather less competitive £1,300.

Gaming heaven

Cutting-edge consumer kit aside, Akihabara is still the place to go to tease out some bizarre elements of videogaming's past. Some shops have whole floors dedicated to certain gaming niches – such as the myriad anime sex titles and retro games available. One store's oddments selection spanned several floors, offering a selection of retro consoles and games that range from rare MSX machines to more recent examples such as the 32X. Amazingly, some kit had appreciated substantially since its original introduction well over a decade ago – anyone after a copy of the original *Dracula* (*Castlevania*) for the MSX would have to cough up ¥10,000 (£50), while certain PC Engine titles were commanding far more.

Most stores, naturally, are dedicated to selling the latest releases. Many outlets located in Akihabara encourage its customers to play titles weeks before their release, on consoles positioned outside on the street. And some employ a booking system so that release-day disappointment is minimised. Tecmo's *Gallop Racer 2*, Atlus' N64 racer *Snobow Kids* and

Sony's *Gran Turismo* were commanding attention when Edge visited, with the latter being built up for its grand launch on December 23 in Japan (billboards all over Tokyo depict a car shrouded in a silver drape). Given the exceptional quality of Sony's racer – Edge had to be prised off the controller by one shop assistant in order to allow more people to play – it should provide Sony with valuable pre-Yuletide ammunition.

Sony also had cause to celebrate recently, when *Minna no Golf* shipped its one millionth unit – it's the first internally developed title to pass that much-coveted mark. The title's success has been attributed to its simple play mechanics and rewarding depth of play. And being Golf...

Monster hits on Game Boy

When Enix announced it would be developing *Dragon Quest* for the PlayStation rather than the N64, everyone assumed that the company had abandoned Nintendo forever. But that's not the case. Enix has recently announced a new title in the *Dragon Quest* Series – *Dragon Quest Monsters* – which will soon be released on the Game Boy.

Interestingly, the title, which features various characters from *DQVI*, is actually a *Pocket Monster* clone rather than an RPG – a fact that shows just how immensely popular the new genre is in Japan. Edge now wonders whether the beat 'em up is set to go the same way. Next year will probably see the release of *Pocket Street Fighter*, in which the player has to rear a cute little Ken or Ryu before putting him into battle. A touching vision, indeed.

Game Boy props up Nintendo

The Tokyo stock exchange may have taken some knocks of late, but Nintendo still seems to be pulling in the loot. The company recently announced that its pre-tax profits for the first half of 1997 have risen by 64% to ¥49bn, while sales have increased by 54% to ¥202.9bn despite a sluggish domestic performance by the N64; apparently, out of the 5.38m units shifted between April and September, only 430,000 went to Japanese homes. Luckily, though, the *Pocket Monster* frenzy still sweeping the country has boosted Game Boy sales, with 5.13m units shipped in the first half of the current fiscal year. Nintendo is now confidently predicting an end-of-year profit around the ¥116bn mark. It's all right for some.

E



Sony's *Minna no Golf* (above) is the company's first home-grown million-seller in Japan. *Gran Turismo* (right) could follow it.



Some game stores in Akihabara have floors specialising in retro gaming kit. A Sony MSX machine (centre) was one of the rarer (and more expensive) items







Shigeru Miyamoto

AN AUDIENCE WITH...

AT THIS YEAR'S NINTENDO SPACE WORLD EVENT, **EDGE** CAUGHT UP THE BIGGEST NAME IN VIDEOGAMES FOR WHAT HAS BECOME ALMOST AN ANNUAL TRADITION. AS NINTENDO PREPARES TO ENTER ONE OF THE MOST IMPORTANT YEARS IN THE COMPANY'S EXISTENCE, **EDGE** WAS EAGER TO LEARN HOW MARIO'S FATHER SEES THINGS...

Shigeru Miyamoto seems in fine fettle. But then he has good reason to be – in the main hall, some distance away from the room in which **Edge** is interviewing him, his latest labour of love, *Legend of Zelda 64*, has Space World attendees captured under its dizzying spell.

To single out *Zelda 64* is to miss the point, though; Miyamoto-san has a hand in a great many projects – not least of which are the *Mario Artist* series of titles being developed for the 64DD device. Here is an individual to whom creativity is king, whether that is creativity from him in game design terms or creativity from the perspective of a Nintendo 64 owner contemplating the next stage of the machine's life in Japan via the 64DD.

In the following interview, Miyamoto-san discusses just about every aspect pertaining to what has become – outside of his homeland, at least – one of the most successful games machines ever created...

Edge: Can you give an outline of the games that you feel are important on display today?

Shigeru Miyamoto: For a start there are titles that failed to meet the original schedule but are now about ready to go, so they're the most important titles here. Have you played them yet? Because you can feel that they have a very Nintendo-like touch – I hope you like them.

Edge: Which are the most important games at the show for you?

SM: *Zelda*, *Yoshi's Island* – I mean *Yoshi's Story* – and *F-Zero X* and *1080° Snowboarding*... because I'm working on these titles! (Laughs)

Edge: Which one has had the most time spent on it?

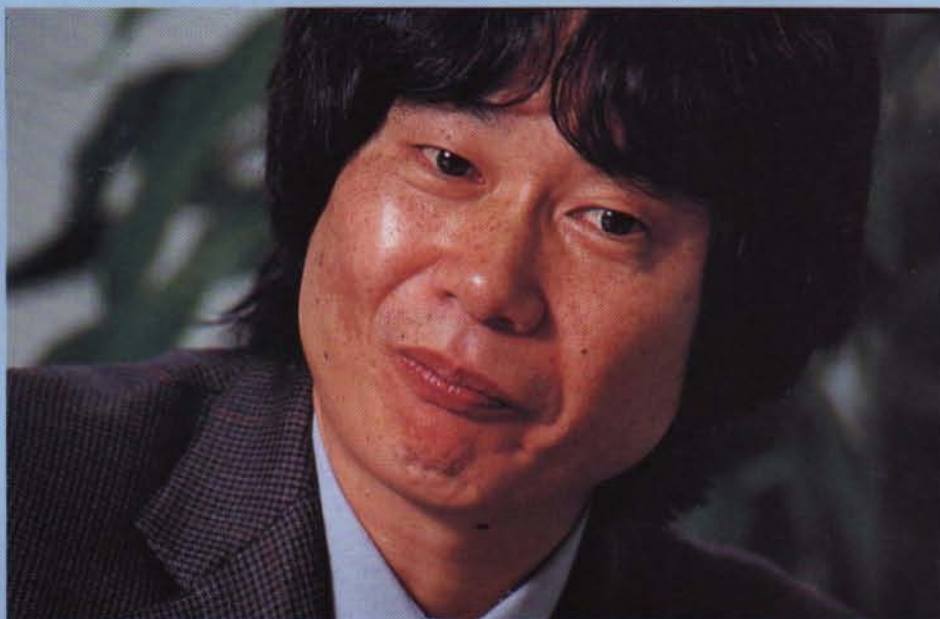
SM: *Zelda*, definitely.

Edge: How do you divide your time up between the various projects?

SM: It's hard. Shifting my train of thought from one project to another isn't easy. I have to plan my time, but even then I often end up thinking of other games than the one I'm scheduled to be working on at that point. Sometimes I have to juggle two things at once.

Edge: So what was the most difficult thing to achieve when making *Zelda*?

SM: I suppose the biggest problem was the proportion of my time occupied by looking after software. We wanted to launch for Christmas but it will be



◀ three months later. Keeping quality high has consumed lots of time – we had to set up an environment that enabled creators and artists to work efficiently together to achieve the required quality.

Edge: Mario offers the same kind of sense of exploration as *Zelda*. Was it difficult to make it feel different?

SM: No, not really. There were many things we could not do with *Mario 64*. For a start, rather than concentrating on slinking out game objectives we tried to make *Zelda* an experience where the player can enjoy the artist's environment and experience new sensations. People will feel something by being in *Zelda*'s world.

Edge: Talking of Mario, how is *Super Mario 64 2* going?

SM: The game has already been running for one year on the 64DD system. We have still not decided how much new data we will add to the game, but I think we will release it within one year of the 64DD launch. We've ported it from cartridge to 64DD, and it's likely we will release it on 64DD only. The main merit of using a dual system: cartridge-64DD is while the cartridge takes care of realtime data, the 64DD can take care of switching the maps and scenario, but the new Mario game currently fits onto the 64DD disk neatly, so a cartridge is not required.

'Super Mario 64 2 has already been running for a year on the 64DD. I think we will release it within a year of the 64DD launch, and on 64DD only'



Edge: Is there anything more you can tell us about it?

SM: Well, we are currently working on a system where Mario and Luigi can co-exist, and they are both controllable by the player. But we will finish more game elements when we finish *Zelda*.

Edge: Staying with Mario, *Super Mario RPG 2* looks different to the first game...

SM: The first *Super Mario RPG* was 2D, so we wanted to make one 3D and use rendering technology. As you know, *Super Mario 64* is already 3D – we are looking at ways in which we can separate the two visually. In *Yoshi's Story* there is a picture book you can flip through, so in *Super Mario RPG 2* we may want to do something similar.

Edge: Tell us about *Yoshi's Story*. The original game was quite a big title for you, so is this an important release?

SM: Yes, but my colleague Mr. Tezuka is taking care of *Yoshi's Story* for most of his time – he's our group director and has been working with me a long time. *Yoshi's Story* is being produced by him, and I'm mostly focused on *Legend of Zelda*. As you can see, *Legend of Zelda*'s main theme is to play inside the virtual world while *Yoshi's Story* focus is to give a storybook feel.

Edge: What distinguishes *Yoshi's Story* from the 16bit version in your opinion?

SM: The ideas in *Yoshi's Story* couldn't be realised in the previous *Yoshi* game and the quality is much higher overall, I think. They are virtually identical in terms of gameplay, though, and it's basically a 2D game, but in some ways it is a 2.5D game in that very large objects can rotate, and you move with the analogue stick. With the RumblePak plugged in you can even feel objects tremble before they move – there are lots of new ideas.

Edge: *Yoshi's Story* will no doubt appeal to players who appreciate colourful, cartoon-style graphics. How do you feel about the more mature content of popular games like *Resident Evil* and *Tomb Raider*?

SM: Personally, I like the games you mentioned and I think that *Zelda* is already a step in that direction. As long

as we can maintain the same high standards in our games then I would like to try anything.

Edge: What can you tell us about the progress of the game *Jungle Emperor Leo*?

SM: I think we're in the middle of the development phase. So far we've made three initial stages. The team has grown to 20 or more, so we must accelerate progress or it will be expensive to complete.

Edge: In Japan, Nintendo used to be a strong format for RPGs and the N64 seems to be poorly supported so far. Do you think the 64DD will become a prominent platform for RPGs?

SM: Yes, the 64DD is well suited to RPGs. I think that when they see that the 64DD sells, companies will start making RPGs for the 64DD. Nintendo has already announced *Mother 3*, *Super Mario RPG 2* and *Zelda*, and we're planning to release them within six months of the hardware launch.

Edge: But do you not think the noticeable lack of RPGs is one reason why Nintendo – and more importantly the N64 – is not the market leader in Japan?

SM: Yes, this may be correct. There are lots of RPG fans in Japan, but I am concerned that the RPG market is shrinking rather than expanding at present. Children are currently into the Pocket Monster type of game instead. It is a kind of roleplaying game, but I suspect that it is not those aspects that provoke children's interest in the game.

Edge: Which of the thirdparty games have impressed you?

SM: *Shadow Kids* sounds good, and the Hudson and Konami games are promising. These companies are gaining experience in N64 developments, and next year they will be able to come up with good adventures and RPGs.

Edge: Is Nintendo successful because it's exceeded expectations? Where do you find clues in developing ideas?

SM: We like to do something others haven't. If I propose an idea to Mr. Yamauchi that he's never heard of before, he will probably say, 'Do it.' It's interesting, and that is his philosophy. I'm trying to see things from as many angles as possible. If we just concentrate on the process of creating something, we may blind ourselves to important ideas, and our games will turn out like everybody else's. I always try to see it from another view, to ask, 'How will people actually play these? What will parents think of their kids playing?' These questions are foremost in my mind.

'If we concentrate on the process of creating something, we may blind ourselves to important ideas, and our games will be like everyone else's'

Edge: There's a lot of focus on the 64DD at the show, despite the fact that the launch has been delayed and the software is unconventional compared to most games. What do you find exciting about the system?

SM: On the 64DD booth you will find the *Mario Artist* series and you can actually see how it works, including the video-capturing system which is really interesting. Of course it is now more than a year since we launched the N64 in Japan, and perhaps the most important aspect is that we have become accustomed to exploring its abilities. I think you can now see the potential of the N64 at last.

Edge: What else should the average Nintendo fan be interested in?

SM: We're also showing several attachments, including the Game Boy Pocket Camera device – it's a splendid toy. And the 64GB adaptor, which connects the Game Boy and N64. With Game Boy compatibility and capture board





possibilities we can develop new horizons for entertainment. And also across the *Mario Artist* series, the data is transferable – you can make a picture in *Picture Maker* and then transfer that to *Talent Maker*.

Edge: Originally it was *Zelda 64* that was being touted as the title that would be the 64DD's killer app. Why was the decision made to release this as a cartridge game?

SM: I think the 64DD should be a device allowing lots of creativity. For *Zelda*, we wanted to prioritise the cartridge version. Now, we are going to sell the 64DD next year, so we are thinking of porting *Zelda 64* to it. We have not decided yet whether the 64DD version will be used with the cartridge, or whether we will make it into an independent game. You may be able to change game scenarios, but we are still working out such details.

Edge: So the release date of the 64DD version is still not decided yet?

SM: I think it depends on the number of staff that we get working on the 64DD version.

Edge: So far then, it seems that 64DD software is being characterised by its creative traits. What plans for new gameplay experiences do you have?

SM: I can't really go into detail about it at this stage I'm afraid, but one example is that we will be releasing *F-Zero X* on cartridge and then later on 64DD. The 64DD version enables players to make their own cars and courses, or edit the existing ones. This editing program already exists (visible proof could be found on-screen in the *Space World* version) on the cartridge we are showing here, but you cannot use it without the 64DD... I think 'Addition' will be an important keyword for the 64DD. Seasoned players who are beginning to tire of the game will be able to add some new data or courses, and then even swap those edited courses.

'Update' will be another keyword. You will be able to update the Championship data, for example, and in doing so will be able to play against new competitors. You will be able to record the best player's performance and use it as a ghost. If such a system is successful then the next step will be to connect players to a network.

Edge: It seems that this kind of project is for the future, whereas cartridges form your current strategy...

SM: Well, this system is already in the *F-Zero X* cartridge and we are going to sell the 64DD version next year. Maybe *Pocket Monster* is not well-known abroad, but it is big in Japan at the moment. We are showing systems here that link *Pocket Monster* with 64DD so that players can see the monsters in 3D and add new data.

Edge: Was it a strategy of Nintendo's to create a link between the Game Boy and N64?

SM: If you are asking me if it's a business strategy, I have to answer yes. But I honestly believe it is very interesting to explore the possibilities of compatibility between these pieces of hardware. As a concept it's pretty unusual in the toy world. To reflect this we're providing a new *Pocket Monster* character to all our visitors at Space World. Such characters will be distributed only during particular events – like Space World – so children are already experiencing additions to their games and exchanging data. The 64DD can actually expand on this.

Edge: In the past consumers have proved reluctant in purchasing hardware add-ons for their game systems. The original Famicom Disk System was not a huge success and Sega systems such as the Mega-CD and 32X were spectacular flops. Why will things be any different for the 64DD?

SM: Frankly, I wanted to release an N64 with a built-in 64DD at the beginning... But the cost was prohibitive and we didn't have time to do it. I regret that, but we still want to release the 64DD. We'd like the disks to be as inexpensive as possible, but they will not be as cheap as CD-ROMs to manufacture. However, disks are much faster than CDs and have more storage capacity than cartridges. We are not sure about the cost of the 64DD itself, but it should be much cheaper than a console. However, as CD-ROM proliferates, a cost reduction war is developing in the market, and we do not want to get involved. We want to create software with real value.



prescreen

A roll call of the newest arrivals in the world of videogaming

Half a step beyond...

The 2D platform game resurrection continues unabated, led by a familiar face...

All things being equal, the passing of December 1997 should have brought with it the Japanese release of *Yoshi's Story*. Nintendo's latest 64bit update of a past classic should serve as a reminder to the industry that more dimensions do not necessarily make for a stronger product. It is an indication of the respect for Nintendo's bygone glories that instead of criticising the company's lack of original software, gamers, press and industry alike await its 'rehashes' with baited breath. However, Nintendo is not holding the 2D fort alone, as Treasure's excellent *Yuke Yuke Troublemakers!* has already demonstrated.

Joining the ranks of platformers this spring will be two Japanese releases, Whoopee Camp's *Ore Tomba* and Namco's *Klonoa*, both destined for the PlayStation. In a similar fashion to *Yoshi's Story*, both of these titles are essentially what Nintendo has coined 'two-and-a-half dimensional'. It could be argued that the first of these games was the lacklustre Saturn launch title *Clockwork Knight* – although pointing to Crystal Dynamics' original *Pandemonium* would be easier, as it implements polygons all round to create a pseudo-3D world. *Klonoa* is very similar in execution, although

Namco has gifted its product with whatever it is that makes Japanese platform gaming so endearing.

When considering modern platform titles, a clear distinction must be made between those that are essentially two-dimensional-but-with-a-bit-tagged-on, such as *Yoshi's Story*, and those that attempt to conquer the z plane, such as the recent *Croc*. It's remarkable that since the inception of the currently dominant formats, only two credible 3D examples have been created: *Super Mario 64* and *Tomb Raider*. However, while others (notably *Crash Bandicoot*) have been rightly criticised for failing where those games have succeeded, *Yoshi's Story*, *Ore Tomba* and *Klonoa* must be judged from a different standpoint. In some ways, these 2.5D games have a harder task being accepted, for there are a wealth of reference points against which they can be compared.

Edge is merely glad to see developers concurring with an opinion that it has held for a long time – that 3D games are not inherently superior to 2D games, and that rather than being wasted on dull-polygon worlds, effort should instead be expended on that most vital of aspects: fun.



While the Saturn title *Clockwork Knight* (left) and SNES classic *Yoshi's Island* (centre) were possibly the first 2.5D platform games, *Pandemonium* (right) defined the genre more clearly

Edge's most wanted

The videogames making waves before their arrival

Legend of Zelda 64	Gran Turismo	Resident Evil 2	R-Types	Blade
(N64) Nintendo	(PS) SCEJ	(PS) PlayStation	(PS) Irem Software	(PC) Gremlin
Having taken the Space World demo version for a decent test run, Edge cannot overstate just how big this game has the potential to be.	Another game Edge had the chance to play in Japan recently – in more advanced form. Current evidence suggests this is a Namco buster.	Despite the realtime miracles evident in games like <i>Zelda 64</i> , it's still difficult not to be eager to get to grips with this in its finished form.	Edge 's all-time favourite side-scrolling shoot 'em up is on its way to the PlayStation – with the sequel thrown in for good measure. Heaven.	What this game does without hardware acceleration is quite staggering. Proof that clever PC coding is alive, well, and in Spain.

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Prescreen Alphas

THE LATEST SHOTS FROM THE LATEST GAMES, INCLUDING SHINY'S *MESSIAH*, NINTENDO'S *MARIO RPG 2*, SQUARESOFT'S *PARASITE EVE* AND *BUSHIDO BLADE 2*, AND THE LATEST BEAT 'EM UP COIN-OP FROM NAMCO



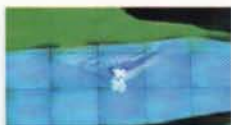
These new 3Dfx shots of Shiny Entertainment's forthcoming *Messiah* are taken from a very early version, but Dave Perry's ambition to make the game some form of technological showcase is already apparent, with intricate textures evident on the polygonal characters, and impressive lighting



Imagineer's Nintendo 64 interpretation of *Sim City 2000* appears to be shaping up well, with some convincing realtime graphical representations of players' plans. Coincidentally, Hal Laboratory has plans to produce a 64DD-specific version of *Sim City*, which should see the light of day in late 1998



Early impressions are that Sega's AM1 division is on to a winner with its next Model 3 title, *LA Riders*. Offering a similar quality of gameplay to Konami's excellent *GTI-Club*, *LA Riders* is a motorbiking game with a difference: the bikes are Harley Davidson replicas. However, it's not yet clear whether or not Sega has secured the license to use the famous hogbike brand



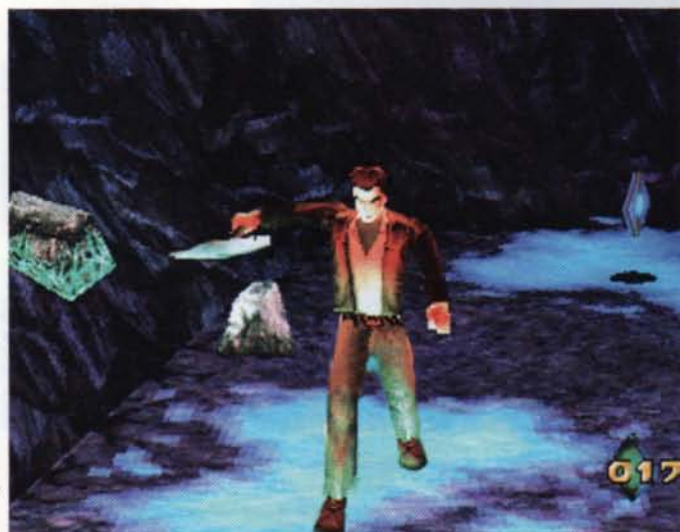
Jungle Emperor Leo was shown at Nintendo's Space World on a video wall only (hence the poor quality of these images) and is looking extremely promising. Ironically, many will spot a similarity to Disney's *The Lion King* – *Leo* is based on the same '60s Japanese anime series Disney allegedly copied



Mario RPG 2 (left) is to be developed by Intelligent Systems and released as a 64DD title. It adopts the same pseudo-3D aspect of *Yoshi's Story*. *NBA Basketball* (right) was a Nintendo Space World surprise and is looking mighty impressive



Parasite Eve, the first PS game from SquareSoft's US office and originally thought to resemble *Resident Evil* in terms of gameplay, is in fact an RPG incorporating classic Square roleplaying elements



Fifteen years after his first outing on Atari's 2600 console, *Pitfall* Harry returns. Produced again by Activision, the game's similarity – at least visually – to *Tomb Raider* is clear. Many of *Pitfall*'s classic traits, including swinging from vines and disappearing pits, have survived the transition to 3D. Aside from its 20 levels, *Pitfall 3D* also features the vocal talents of 'Evil Dead' star Bruce Campbell



These shots of Namco's recently announced arcade beat 'em up, *New Weapon Fighting Game* (working title), looks like a cross between the company's own *Tekken 3* and *Soul Blade* – which isn't surprising considering the team developing it was also responsible for both of those titles. In Japan, Namco is inviting gamers to suggest any ideas they would like to see included in the game.



EA's *Redline* is a curious blend of the firstperson shooting and driving game genres. While primarily an action title, the game's subtext is to gradually develop the attributes of the protagonist. Set for release in March, *Redline* appears to be based around the 'Mad Max' movies, with features such as gang warfare and car-jacking.



Powerboat Racing, being developed by East Point Software and part of Interplay's VR Sports division, is (as its name suggests) a PC speedboat racing title that adopts a pure arcade racing line rather than a simulation approach, promising eight tracks as well as the usual raft of racing options.

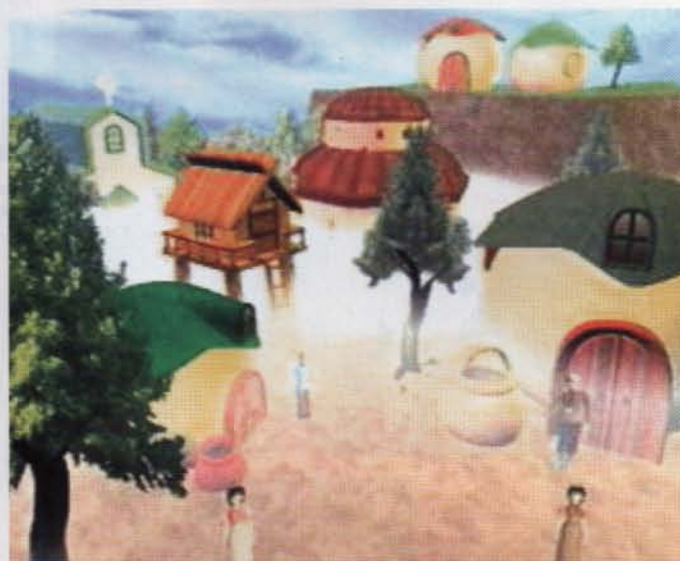
Electronic Arts' *Dark Omen* continues the series of titles set within the Warhammer world originally created by Games Workshop. Players fight campaigns in the role of the leader of the Grudgebringer mercenary army



Bushido Blade was a brave attempt by Square to redefine the limits of the fighting game genre. Retaining the first game's open-plan arenas, major alterations are being made to *Bushido Blade 2*'s control system, with only two buttons now required



Banjo-Kazooie was shown at Nintendo's recent Space World Expo and was looking impressive – as these two new screenshots certainly attest



Ancient Roman Extra (above), by Nihon System Supply, is an epic PlayStation RPG that marries typically strong Japanese character design with promising graphics and wonderfully detailed interiors

LEGEND OF ZELDA OCARINA OF TIME

NINTENDO 64 OWNERS MAY HAVE TO BE PATIENT WHEN IT COMES TO SOFTWARE FROM THE MIYAMOTO STABLE, BUT WHEN IT ARRIVES IN THIS SORT OF SHAPE, THERE CAN BE FEW WHO WOULD BEGRUDGE ANY DELAY...



The level of detail in *Legend of Zelda: Ocarina of Time* is astounding. The game easily boasts the most impressive visuals of any N64 game to date



Different views will be available and the camera system proves a much-improved version of the one seen in *Mario 64*

Zelda 64, or *Legend of Zelda: Ocarina of Time*, to give it its full title, has to be one of the most eagerly awaited games of all time. Ever since the first screenshots were divulged to the press, anticipation rose and expectations spiralled to an unprecedented – and many thought unrealistic – level. Yet judging by the playable demo shown at the recent Space World expo, Nintendo may well have surpassed even the most demanding individual's wishes.

Nintendo is keeping typically quiet about story details but it is known that Link grows throughout the game into adult form, and as he increases in size, his fighting and climbing skills improve accordingly. Furthermore, once fully developed, he's able to use magic, with which he can combat adversaries, for example. He does of course have plenty of other weapons available, such as swords (short and long), bombs, a stick, a hammer, exploding magic nuts, a boomerang, and a bow and arrow which can be fired using a firstperson perspective when accuracy is of paramount importance.

Visually, *Zelda 64* can leave very few

Format: Nintendo 64
Publisher: Nintendo
Developer: in-house
Release: April (Japan)
Origin: Japan



Link will be forced to face a wide variety of enemies throughout his long adventure in search of Princess Zelda. Some will prove deadlier than others

people unimpressed. All of the environments – complex towns, vast open expanses, dark dungeons – feature endless texture-mapped polygons drawing further out into the horizon than any N64 game before it. This is also the first title for Nintendo's machine to boast realtime light sourcing and the resulting effect is startling, with the brilliantly animated characters and huge bosses casting varying shadows and reacting to the light around them whenever appropriate.

The camera system is a much-revised version of the one used in *Super Mario 64*, showing none of the problems that plagued the latter. Yet one of the most revolutionary aspects in *Zelda* concerns its control system and is evident during battle sequences. Holding down the Z trigger button on the N64 pad forces the camera to adopt an over-the-



The horse can be made to go faster by whipping it, although every time this is done, one carrot will be used up



The game's opening sequence sees a scared young Link witness Zelda's kidnapping by a knight who gallops into the darkness



The lighting effects in *Zelda 64* are one of the game's most impressive features and set the atmosphere of the many different areas perfectly

shoulder view, and a cursor appears to indicate Link is locked onto the adversary. Any sideways movement of the analogue stick moves the hero around the enemy without ever losing sight of his target. The lock can be broken at any time by simply releasing the Z trigger. It's a feature that can also be used to investigate any item found in the game, and a fundamental characteristic Nintendo has indicated will be used in all of its subsequent 3D action titles.

While understandably, much attention during Space World focused on *Legend of Zelda: Ocarina of Time*, a lot of interest was generated by news that the 64DD version of the game might see a Japanese release before the end of 1998. Few details about the nature of this second *Zelda* game currently exist but it's known to be in development by a different team than that responsible for the cartridge game, and according to Shigeru Miyamoto it's also an action RPG. Nevertheless, until more elements are revealed, *Legend of Zelda: Ocarina of Time* will occupy the limelight. Expect something very special indeed.

E



F-ZERO X

EVER SINCE THE ORIGINAL *F-ZERO* INTRODUCED THE CONCEPT OF FUTURISTIC, HIGH-SPEED RACING, NINTENDO GAMERS HAVE DREAMED OF A POLYGON-PACKED SEQUEL. THOSE DREAMS WILL SOON BECOME A REALITY...



Though *F-Zero X* has a greater complement of selectable craft than its predecessor, fans of the SNES original will find some of them familiar

F-Zero X cribs visual cues from the *WipeOut* duo, tying the 2D track layouts of the SNES title into knots without diluting the brash, vivid colour schemes

The original *F-Zero* indelibly etched the power of the SNES and Mode 7 onto the consciousness of gamers around the world. Now *F-Zero X* promises a repeat performance for the N64.

Nintendo's latest 64bit update is so blindingly smooth and fast that *Edge* can state with authority that *F-Zero X* is going to be responsible for an epidemic of motion sickness when it hits the streets next summer. Still frames can't convey anything of the 60fps speed of the game, which gives the player a tangible impression of what it's like to travel at over 500 mph. Put simply, this is the fastest racing game ever seen.

Following the same basic concept as its forebear, *F-Zero X* puts the player in the cockpit of a rocket-propelled hovercraft. The aim, as always, is to take the chequered flag before the rest of the field. However revolutionary *F-Zero* may have been on the SNES, though, its tracks were confined by Mode 7's essentially two-dimensional capabilities. Given the 3D power of the N64,

Format:	Nintendo 64
Publisher:	Nintendo
Developer:	In-house
Release:	June
Origin:	Japan



Nintendo unveils the secret of avoiding slowdown and pop-up without resorting to fogging - a twisting, sinuous track that keeps players alert



F-Zero obsessives will be pleased to note the retention of jumps in the sequel - often in awkward places

Nintendo's in-house development team has really pushed the design envelope, creating the looping, twisting courses *F-Zero* was always crying out for. It is this tortuous design that permits the game to maintain its high frame rate, rather than following Acclaim's *Extreme-G* example and relying on the ubiquitous fog effect to prevent pop-up.

The obscuring of the track does not, however, impair *F-Zero X*'s excellent playability. Rapid action is the order of the day here, and Nintendo's intention to keep up the rate at which that occurs should be applauded, particularly in light of the occasional slowdown evident in *Extreme-G*. That priority hasn't prevented players being offered a choice of four selectable views, though, ranging from a bird's-eye view to one that almost puts the player inside the craft.

Even at this stage, some six months before release, the craft boast remarkably convincing handling physics. The animation is suitably fluid, too, amply demonstrated as the hovercraft bounce back down after being launched high in the air by the many jumps that litter the track. Nintendo is currently showing off a version of *F-Zero X* featuring 30 selectable racing craft, but whether that many will be available from start-up in the final game is unknown. While the polygon count for each vehicle is not particularly high, there is no noticeable slowdown, even with up to 20 vehicles on screen, suggesting that Nintendo has made an acceptable trade-off.

F-Zero X features all of the usual racing title play modes, including GP Race, Time Attack, Practice, and Versus Battle. As hoped, up to four players will be able to take part simultaneously in the Versus Battle, with only



If the craft look polygonally challenged, it's because they are. Most players will consider that an acceptable trade-off for speed, though

the slightest drop in frame rate. Likewise, twoplayer games appear to suffer very little degradation in graphic quality.

Edge was also pleased to note that *F-Zero X*'s rumoured compatibility with the 64DD has made the transition from development ideal to physical reality. The in-game menu lists both 'Course Edit' and 'Machine Edit' options, implying that buyers of the N64 disk drive will be able to design their own race tracks for the game. While the *Mario Artist* titles announced for the 64DD are undoubtedly interesting, features such as course creation in *F-Zero X* are the factors that will win the device a place in gamers' hearts. The scope for players to create their own tracks and then challenge their friends to race on them is fantastic, and is as important to videogaming as Nintendo's last triumphant innovation - the analogue joystick.

Nintendo seems intent on encouraging creativity among gamers at a far more grassroots level than Sony's Net Yaroze, while the way in which the 64DD is being promoted is re-affirmation of Nintendo's self-proclaimed status of 'toy maker'. If that means the company will continue producing 'toys' like *F-Zero X*, Edge looks forward to a long and interesting childhood.

E

YOSHI'S STORY

WHILE *Yoshi's Island* ARRIVED TOO LATE IN THE LIFE OF THE SNES TO REALLY MAKE ITS MARK, NINTENDO'S 64BIT UPDATE LOOKS SET TO ALTER PUBLIC PERCEPTIONS OF WHAT 'NEXT GENERATION' GAMING IS ALL ABOUT



Yoshi's Story is one of the best-looking platform games ever made. Various graphic styles are used throughout the game, while colour schemes are pure psychedelia. Scaling effects are set to be jaw-dropping



One of NCL's star games at Space World, *Yoshi's Story*, is yet another update of a SNES classic. Though some accused *Yoshi's Island* of being too easy, most consider it to be one of the most delicate game designs ever. After playing the 90% complete version, **Edge** can attest that the same qualities are evident in the sequel.

Beyond the stunning visuals, the most obvious change to the game flow is the

omission of baby Mario. In the original, various Yoshis had to carry the infant plumber to safety through eight worlds. Now the aim is to choose one of six Yoshis with which to collect 30 'Super Happy Tree Fruit' secreted around each of the 24 levels. By collecting all of the fruit, the player will succeed in making their Yoshi 'happy'.

Euphoria can also be accrued by collecting melons, one of Japan's most prized fruits, while the Yoshis can now call upon their trusted dog, Poochie, for help. As each Yoshi has a preferred fruit colour, there is an instant replay value to the game, aside from discovering the numerous hidden sections.

Control is via the N64's analogue stick, permitting the same level of instinctive play as *Mario 64*, and the Yoshis retain their ability to swallow or spit out their enemies – the targeting crosshair is also perfectly suited to the N64's stick. NCL looks to have set yet another benchmark – one that the opposition can only gaze at enviously. **E**



Format:	Nintendo 64
Publisher:	Nintendo
Developer:	In-house
Release:	Dec 21 (Jap)
Origin:	Japan

ORE TOMBA

SIDE-SCROLLING PLATFORM GAMES BUILT OF POLYGONS ARE HARDLY A NEW BREED, AND MANY PLAYSTATION OWNERS ARE TIRED OF THEM. WHOOPÉE CAMP HOPES THAT WHAT'S NEEDED IS SOMETHING A LITTLE DIFFERENT...



It's possible to grab just about everything that appears in the game – on the first level, for example, the only way to get a necessary power-up is to hold on to a giant egg and smash it (left). Controlling the hero takes a little bit of getting used to; fortunately, early enemies are of the weak variety (right)



Predictably crackers character design from Whoopee Camp

Anyone who gets their videogame information from the lifestyle press could be forgiven for thinking *Crash Bandicoot* was the first ever scrolling platform game, and that everything else out there is just an inferior clone. This is, of course, patently not the case. Over ten years ago, *Super Mario Bros.* and a clutch of other examples developed many of the rules today's pale imitations slavishly abide by.

Now the producer behind one of those pioneers – *Ghosts 'n' Goblins* – has returned to the 2D platform fray with a new company, Whoopee Camp, and a brand new title, *Ore Tomba*. This is vintage Japanese platform action, in many ways similar to the N64 romp *Yuke Yuke TroubleMakers* and, looking back much further, the Namco SNES game *Xandra's Big Adventure*. The action takes place in a brashly coloured cartoon world where the player receives pages of textual information from weird characters to complete a bizarre puzzle-infested side-viewed quest. It's all jumping over obstacles, attacking enemies with a yo-yo-like weapon, and trying to find bonus objects amidst beautiful colourful backgrounds.

Like *Yuke Yuke*, there's a hysterical knockabout farce feel to the whole thing. In the opening level, for example, the player can either pick up the enemies (bloated pigs with pitch-forks) and throw them across the screen, or choose to jump on their backs – something they do not take kindly to.

Other objects such as jumping frogs, golden chickens and many others can be collected for use later in the game.

And it's not all pure 2D: at certain points the player can manoeuvre 'into' the screen to reach different planes of action. It's also possible to manually tweak the camera angle, since *Ore Tomba* isn't so retro it can't play with the visual possibilities of the PlayStation.

Ultimately, this looks set to be another brilliantly offbeat but entertaining title that could only come out of Japan. If the rest of the game lives up to the sample **E** Edge has enjoyed, the west may finally realise that platformers need more than polygons to make them compelling experiences.



The beautifully cartoon-styled backdrops aren't there just for show – the player can jump and cling to various elements (above)



Format:	PlayStation
Publisher:	Whoopee Camp
Developer:	In-house
Release:	December (Jap)
Origin:	Japan

XENOGears

STRONG CHARACTERISATION AND DEFINITIVE STORYTELLING SKILLS ARE A SQUARESOFT STRENGTH; ITS LATEST RPG MUST CAPITALISE ON THOSE VALUES TO ESCAPE THE SHADOW OF FINAL FANTASY VII



Some of the early foes in the game, such as these deformed cattle (above), defy the use of adjectives such as 'threatening'



In addition to featuring a realtime environment, *Xenogears* has some great lighting effects

Barely has the *Final Fantasy VII* fallout begun to settle than SquareSoft announces yet another sprawling epic: *Xenogears*. Graphically, the game spins off at a tangent from its stablemate, placing 2D sprites into a 3D world and eschewing rendered scenery in favour of realtime 3D backdrops. The primary benefit of the change is that the game world can be rotated, allowing the player to examine settings from every angle. At times the effect is strangely reminiscent of SNES *Mode 7* – and, given that many of the staff previously worked on *FFVI* and *Chrono Trigger*, perhaps it should be expected that *Xenogears*' strong design values arouse fond memories, too.

Following the usual RPG convolutions, the story follows the exploits of Wong Fei Fong, a young martial arts devotee. When his village is attacked by a group of giant robots, known in the game as 'Gears', Wong wrests control of one and initiates combat with the others before setting out into the world.

Though the game features a number of unusual locations, including a vehicle that travels beneath deserts, the version *Edge* has played was noticeably text-heavy. Some Westerners may not appreciate this now that their appetites have been whetted by *FFVI*.



Players can take control of 'Gears' – giant robotic suits of the popular Mech variety



Xenogears retains the classic turn-based battle system so beloved of RPG otaku. However, the menu system of past titles has been dropped in favour of various button combinations, adding the facility for players to implement secondary attacks. And in a similar fashion to *FFVII*, opponents remain invisible on the game map until suddenly encountered, a traditional feature that is beginning to appear dated. *Xenogears* has some clever touches, though, and should be well received following in the footsteps of its bigger, ultra-successful brother.



The use of 2D sprites within a 3D world could prove to be a better solution than the opposite one used in SquareSoft's hugely popular *FFVII*

Format:	PlayStation
Publisher:	SquareSoft
Developer:	In-house
Release:	January (Japan)
Origin:	Japan

KLONOA: DOOR TO PHANTOMILE

FOLLOWING WHAT CAN ONLY BE DESCRIBED AS A QUIET PERIOD, GIVEN THE COMPANY'S ONCE-PROLIFIC OUTPUT, NAMCO IS PREPARING AN ATTEMPT TO RECLAIM ITS POSITION WITH AN ODDLY NAMED FANTASY PLATFORMER



Given the typically Japanese character design, the strong use of bold and vibrant colours is perhaps unsurprising. The camera continually readjusts to offer new views of the action (far left and centre), but not to the detriment of gameplay



The first level allows players to venture into a mountain, complete with a minecart section

First prescreened in E48, Namco's PlayStation-specific 2D platformer is nearing completion and looking very much like the kind of quality product that **Edge** has come to expect from one of the industry's most established softcos.

Players assume the role of Klonoa, a Mickey Mouse-like creature with long furry ears and small wings, as he runs, jumps and glides his way through six worlds, comprising 21 colourful stages, in a quest to discover the centuries-old legendary land of Phantomile. The reason for his search is still unclear but along the way Klonoa will be helped by his diminutive friend Huppo, and will encounter people with whom he'll exchange useful information, as well as finding a magic ring which can be used to grab and throw enemies against each other.

At the end of every stage Klonoa will face a customary end-of-level boss, and for these Namco has made an effort to use the 2.5D approach in a more inventive way, rather than for mere background details. Indeed, the first boss stage takes place on a mountain top with a bell on it, around which Klonoa runs in order to dispose of the villainous bird-like creature. The actual stages offer more than just side-scrolling action, and occasionally the view switches so that Klonoa travels 'into' the screen, as in the minecart section early on in the game.

Of course, pseudo-3D games have been done on Sony's machine before, with varying degrees of success, usually as a result of the camera activity. Judging from the near-finished version **Edge** has played, *Klonoa*

does not appear to suffer from the deficiencies of some of its competitors, with the game's camera continuously altering its position to present a clear, unobstructed and most efficient view of the action on-screen, meaning that there are no frustrating cases of leaps of faith, for example.

Whether it will prove accomplished enough beyond this to become the PlayStation's definitive platformer, however, remains to be seen.



Weather changes are typical of extra detail



Despite having 2D gameplay, the illusion of a third dimension is achieved adequately, partly as a result of the camera, which moves dynamically

Format:	PlayStation
Publisher:	Namco
Developer:	In-house
Release:	December (Jap)
Origin:	Japan

WETRIX

WITH A STRING OF SUCCESSFUL TITLES UNDER THEIR BELTS, THE DESIGNERS OF PLOK! AND EQUINOX HAVE FOUNDED ZED TWO AND CREATED WETRIX, AN ENDEARINGLY SIMPLE PUZZLER FOR THE N64 AND PC



These shots from the N64 version reveal a colourful and hectic game. *Wetrix* takes the *Tetris* concept and gives it the most credible aesthetic update yet seen. The game has been held up as Zed Two has packed it with more and more features



Both N64 and PC iterations will offer simultaneous two-player gaming

With only two Nintendo 64 puzzle games to date – the decidedly underwhelming *Tetrisphere* and *Puyo Puyo Sun* (the latter looking like a 16bit game, to all intents and purposes) – the stage would appear to be set for a developer to come along with a product more befitting of the format. *Wetrix*, an isometric puzzle game loosely based on the seminal *Tetris*, is no doubt aiming to fill the gap (and at the same time hitting the PC, no stranger either to decent puzzle games).

Wetrix started life as a simple physics engine, simulating water movement for an undisclosed, larger project. From this kernel grew the idea to combine water effects with the building aspect of *Tetris*. Play involves icons falling onto an isometric grid. They represent actions, raising or lowering the land before a second wave of icons arrive, dropping water into the wells created. The more lakes maintained, the higher the score, but any water lost off the edge of the play area gradually fills a level meter – which acts as an inverse energy bar. Fire, ice and bomb icons evaporate or freeze the water, and blow holes in the landscape.

There are distinctions between the two formats – the PC version features up to seven-player action over a network (with inset screens showing other players' grids), while the N64 has a rotatable grid and various other

graphical improvements.

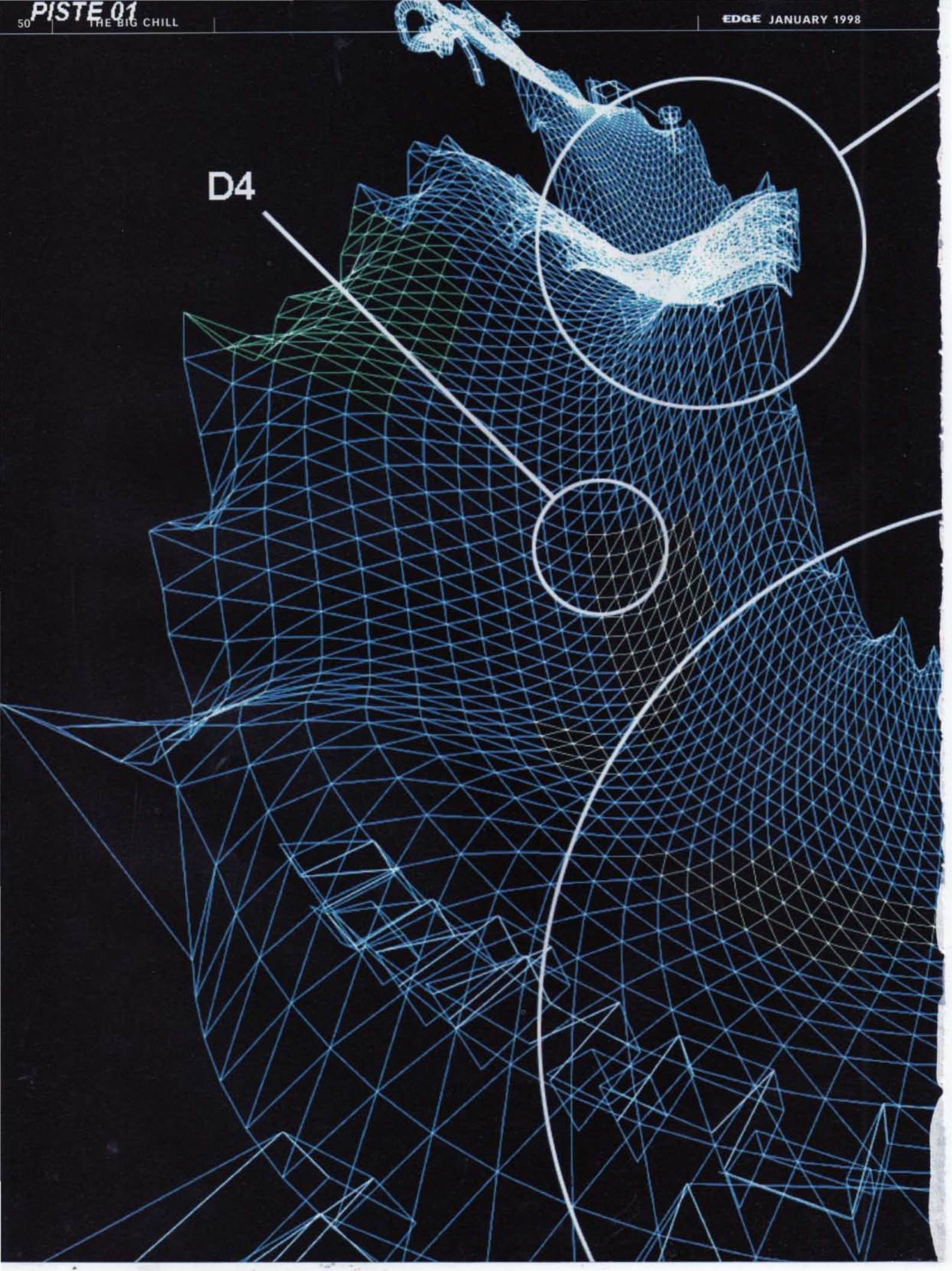
At the moment the N64 supports two-player action, although a four-player system is being considered.

Edge can't help feeling that given its colourful visuals and accent on simple, enjoyable gameplay, *Wetrix* may be more suited to the Nintendo 64 than the PC – but has the potential to shine on both. **E**



The backdrops have yet to be implemented in the current Nintendo 64 build of the game. Previous PC versions had dreamy cartoon cloudsapes

Format:	N64/PC
Publisher:	Ocean
Developer:	Zed Two
Release:	First qtr '98
Origin:	UK



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THE BIG CHILL

The snowy season has brought with it a slew of winter sports titles, from a new Nintendo 64 title from the team behind *WaveRace* to what seems like a hundred and one other variations on the theme. Edge takes to the slopes...

As expected, Nintendo's *1080° Snowboarding* (aka *Vertical Edge Snowboarding*) has shot to prominence within its genre at such speed that its competitors have found the track melting before them. Early impressions of this, the product of a crack team of NCL coders (see overleaf), are of a game that sets new standards for control and visuals within the winter sports genre, at least on home formats. But *1080°* is just one event within the massive renaissance of a long-dormant genre.

Those with long memories (and maybe grey hair) will recall previous attempts at bringing snow sports to various computer systems, stretching all the way back to *Horace Goes Skiing* on the ZX Spectrum. While the antics of Horace were pretty risible, American developer Epyx created several credible winter and summer *Olympics* titles for 8bit systems, interpreting, in many different fashions, the classic Olympiad format set down by Konami's seminal *Track & Field*. The current resurgence includes two new winter Olympics titles, both utilising the time-honoured *Tracks & Field* play system. As previewed in E53, *Nagano Winter Olympics '98* and *Winter Heat*, from Konami and Sega respectively, will cover all major formats between them – except for the PC. The exclusion of the PC from the scene is curious, given its massively popularity in America, although Sega's recent penchant for PC versions of its arcade titles could lead to *Winter Heat* appearing on that format.

Winter Heat is primarily an arcade game, as was Sega's summer Olympics title *Decathlete*. But while both of those games use the ST-V board, Sega announced a new downhill skiing game at JAMMA that uses the Model 3 board to build superlative scenery. In many ways *Ski Champ* is a back-to-basics title, returning to the style of game that kickstarted the current interest in the genre, as seen in Namco's *Alpine Skier* and *Alpine Surfer*. These were the first to place skiing action in true 3D settings, and followed the ongoing trend for arcade machines to become more like fairground rides. Control was restricted to no more than pushing either two 'skis' or a 'board' left or right. It took a home game, albeit a lacklustre one, *Cool Boarders*, to show the way forward.

The arrival of the two Olympics titles was to be expected. This winter's event is to be held in Nagano, Japan, so it was inevitable that at least one of the major Japanese developers would base a game around it. The real core interest (in terms of the wider picture for the games industry) is the current crop of snowboarding games, for they show a strong link between videogaming and another popular youth activity. When *Cool Boarders* arrived, it allowed PlayStation owners to simulate something they did (or aspired to do) themselves, a facet few other genres could offer. Gamers undoubtedly want to drive F1 cars, as sales of Psygnosis' licensed title illustrate, but snowboarding games let fans of the sport integrate the PlayStation into a lifestyle that dictates the style of everything from clothes to music. Whether *1080°* has arrived too late to do the same for the N64, given snowboarding's waning 'lifestyle' credibility, remains to be seen...



1080° Snowboarding



Aside from the obvious magnetic effect *1080° Snowboarding* will have on snowboarders, the game is bound to attract fresh followers to Nintendo's cause. Few would dispute that as games have become more visually accomplished, wider society has found it easier to relate to the videogaming experience...

◀ This latest of the current crop of snowboarding games stands a good chance of setting the benchmark. Having played the 80% complete version of *1080°* at Nintendo Space World, it's already clear that it sets new standards for play mechanics and graphical finesse, significantly upping the ante, not only in the burgeoning snowboarding arena, but among racing games as a whole.

Recent attempts at creating snowscapes on home formats have yielded some fairly angular results. But by using a development of the engine that gave *WaveRace* an edge – even over similarly themed arcade machines – Nintendo's team has built smooth, believable landscapes with fast, winding courses that draw far into the distance while masking pop-up. Just as in *WaveRace*, the N64's controller is perfectly suited to the dynamics of snowboarding, resulting in an intuitive and rewarding level of control.

Although the tracks are currently limited in number, the finished game should at least match *WaveRace* on this count.

Detail, both in the courses and environments, is impressive. While most recent titles using lens flare have elicited a 'not again' reaction, the almost blinding effect in *1080°* has wowed onlookers. Also of note is the trail left behind the boards, coupled with the most realistic snow flurry yet. It would seem NCL's programmers are finding genres in which their machine is visually untouchable – for the time being.

As yet, *1080°* has only four characters to choose from, although the final version will include more. Early impressions are that the fantastically subtle control nuances of *WaveRace* have survived the transition. Much anticipated? *Edge* already has new pairs of Oakleys on order...



It would seem that NCL's programmers are finding genres in which their machine is visually untouchable – for the time being

NCL's game is easily the most visually accomplished snowboarding title yet, boasting lush scenery drawn suitably far into the distance (above), well-implemented snow trails (top right) and a swift twooplayer mode (above right)

An interview with Giles Goddard

Entertainment Analysis & Development, NCL, Japan



It is always unusual for western programmers to be found working under the corporate auspices of a Japanese games developer. And few come more corporate than Nintendo's internal development division in Kyoto. **Edge** recently spoke to **Giles Goddard**, an ex-Argonaut programmer now living in Japan, and one of the lead programmers on *1080° Snowboarding* – the company's flagship snowboarding title recently unveiled at Space World '97.

Edge: So who's working on the *1080°* team?

Giles Goddard: To be honest, it's a bit of a mish-mash, really. There are two programmers – myself and Colin Reed – and we both worked on the Super FX SNES title *Wild Trax* [aka *Stunt Race FX*] for Argonaut Software. I also worked on *StarFox*. We have a designer, who worked on the *WaveRace* project, and our director came from Namco where he worked on *Tekken 2*. Shigeru Miyamoto is the producer.

Edge: When is it scheduled for completion?

GG: Our deadline is February 1998, and we should be able to make it on time. As of today, all we have to do is put in three more characters and add some more maps and then we're pretty much done.

Edge: Everyone seems very impressed with the way it looks – can you tell us a little about what's going on under the hood?

GG: The 3D engine is, of course, the original N64 engine, but then we're doing various interesting tricks. For example, the characters are skinned, so there are no joints between the polygons. Also, all the character animations are interpolations between animation and inverse kinematics. So, basically, when your character hits something in the game his body is modified according to what you hit, from what direction, and at what speed.

Edge: Are you using motion-captured animation in the game?

GG: At the moment, there's no motion capture in it, no. But the motion is really smooth because we interpolate between frames and we have the inverse kinematics in there – so it has that motion capture feel.

Edge: To what extent is it a snowboarding simulation? Are the tricks in the game based on real snowboarding tricks, and to what extent is the interaction between the snowboard and the course terrain based on real-world physics?

GG: As far as the tricks are concerned, the animation needs quite a bit of tweaking and the tricks themselves are a bit dodgy at the moment. But as for the board dynamics, we basically modelled a real board with all the edge friction and underside

friction and so on. So, yes, the game does all of the applications to replicate the real physics of a real board. So when you're skating down in the game and, say, catch the edge of your board down a tree trunk, the game handles all of the calculations in realtime. It's not using any hardwired solutions or anything like that.

Edge: To what extent have you sacrificed simulation accuracy for arcade thrills and gameplay?

GG: Only a little; it definitely comes down on the simulation side of the fence. But having said that, there are certainly a great deal of little fudges in there that make it more of an enjoyable arcade-style experience.

Edge: Will there be a lot of features in the final version?

GG: There will be six or seven courses, plus a training course and a half-pipe for stunts. There will be seven or eight characters and a twoplayer mode.

Edge: What do you make of the other snowboarding games in development for N64? Are you worried at all?

GG: Um, I can't really talk about that. Let's just say that we haven't seen too much competition. We're not sweating too much.

Edge: How long have you been working on the project at NCL?

GG: We started work in April or May of this year.

Edge: So this is only seven months' work? That's pretty impressive...

GG: We're very fast workers [smiles].

Edge: How did you get started at Nintendo? And how difficult is it for a western game maker to be accepted in Japan?

GG: It takes a lot of luck, really. The first time I went to Nintendo I was working for Argonaut Software on *StarFox* and I suppose they don't go around freely employing gaijin programmers, or indeed any other programmers not straight out of the Japanese universities. But it's a matter of being at the right place at the right time, and of getting a reputation for yourself. Then, once they trust you, you're in. And from that point on they'll continue to look after you, regardless of the quality of what you produce. It's a Japanese thing.

Edge: Do you snowboard yourself?

GG: Yes, I'm a snowboarder, and a couple of the artists are snowboarders, and what we're most enthusiastic about is the feel of the game. We know that this is what we've got to get right, and that this is the most important thing. We're trying to make it as real as possible, as opposed to going for the classic, cute, Nintendo look. You can even tell by the music that this isn't your average Nintendo game...

Twisted Edge Snowboarding

Of all the current contenders, Boss Game Studio's *Twisted Edge Snowboarding* looks to offer the most serious challenge to Nintendo's *1080°*. According to Boss's technical director **Rob Povey**, the main difference is that 'we're far more stunt-oriented than they are.' Performing tricks in the game increases speed, so the onus is on the player to trade off points against potential risks.

Having produced *Top Gear Rally* for the N64, Boss already has experience of the console. *Twisted Edge*, even at this stage, is looking remarkably refined, with track designs that include suspension bridges, falling trees and an underground river section. Multiple camera angles and play modes are also featured in the game. Whatever else, expect a release that avoids *1080°* like the plague.



Snow Racer

While others have focused on either snowboarding or skiing, *Snow Racer* (PC/PS) covers both. Based around traditional Olympic events, including Downhill, Giant Slalom and Ski Jumping, players are able to select characters from nine different nationalities. Although all characters can compete in every event, some will be naturally more adept at certain disciplines than others.

Developed in France by codeshop Power and Magic, *Snow Racer* looks fairly impressive, although polygon glitching in the PS version is currently a problem. Some stages take place at night, an unusual and promising feature. Expect more in the final version, including neat light effects and massively exaggerated jumps. As with its contemporaries, *Snow Racer's* release will coincide with the Nagano Olympics.



Some stages take place at night, an unusual and promising feature. Expect more in the final version, including neat lighting effects



Snobow Kids

While others have tried to create semi-simulations of the snow sports, Atlus has disappeared off at a tangent with its game, *Snobow Kids*. The game is very Japanese in its styling and content, and it's uncertain yet whether or not it will be picked up for a western release. However, *Edge* was surprised to learn that Shigeru Miyamoto rated it as one of his favourite thirdparty Nintendo 64 titles at Space World (although some would say his choice was rather limited).

Snobow Kids is a light-hearted production, featuring squat characters and some very off-piste action.

As these screenshots show, certain tracks feature no snow whatsoever, while the various



modes include 'Trick Game' and 'Speed Cross'.

The inclusion of grass-only tracks implies that the developers have tried to expand beyond the limits of the genre. Atlus has also included support for four players and RumblePak, and will be making *Snobow Kids* one of the first within its genre available with a pre-Christmas release (in Japan). Expect more on this unusual title soon.

The control system is currently far too simple, with only jumping and braking buttons at the player's disposal



Snow Speeder

Coming from Genki, developer of the underwhelming *Multi Racing Championship*, *Snow Speeder* is the least-promising N64 snowboarding title. A

Japanese release is pencilled in for March, with other markets to follow, but considering the legal gravitas of the 'Star Wars' brand, a name change is expected before it is released in the west.

Genki has re-used the *MRC* graphics engine, which will undoubtedly put *Snow Speeder* at a visual disadvantage

when pitched against its rivals. In addition to this handicap, the control system is currently far too simple, with only jumping and braking buttons, and Genki has not yet decided if the game will focus on racing, tricks, or both. However, a two-player mode has been included – though it must better the poor quality of *MRC*'s, or *Snow Speeder* will fall way short of the mark. As things stand, *Edge* doesn't envy Imagineer having to promote this game against the competition. ▶

Ski Champ

Originally announced at JAMMA, *Ski Champ* is the latest game from Sega's AM1 arcade division. It is also the first game from AM1 to use the Model 3 chipset, and features some truly spectacular scenery. At one point a train races down the mountain side in a demonstration of pure processing power – one that the current crop of domestic videogame formats cannot hope to compete with.

Other neat touches include wind whipping through the jackets of the characters, and an avalanche that tumbles towards the course during play.

Additionally, players will be able to choose different paths through the courses, in much the same style as Namco's *Rapid River*.

Ski Champ is purely a skiing game, featuring a full-size cabinet that accurately provokes a sensation of involvement in the action. But given AM1's past expertise in creating sports games, it's hardly surprising that *Ski Champ* passes muster. Although Namco has slid down these slopes before with considerable flair,

Ski Champ is enough of a step forward to gather a significant following.

E



More than just boards and skis...



In a similar fashion to its stablemate, *Decathlete*, *Winter Heat* will inevitably appear on the Saturn. Gameplay is less complex than Konami's...

... *Nagano Winter Olympics '98*, which has been developed by separate teams for PlayStation and Nintendo 64. Both are very competent versions

Previously featured in E53, Konami's *Nagano Winter Olympics '98* and Sega's *Winter Heat* focus on the upcoming Olympics in Japan. Konami's game has been developed (by separate teams) for the PlayStation and N64, while *Winter Heat* employs the Saturn-friendly ST-V arcade board. Both titles are equally promising, although *Winter Heat* lacks snowboarding events, which is curious given the current popularity of the pastime both in Japan and the rest of the world.

E



VIRUS 2000

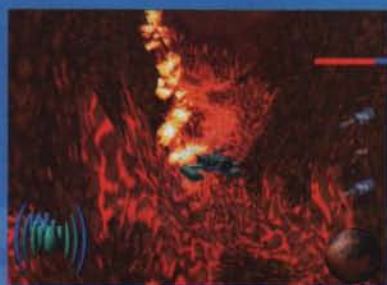


Having co-authored *Elite* and written *Zarch*, two of the most influential 3D polygon games in history, David Braben is preparing his third classic

How long can a sequel wait? A year? Two years? Time, it seems, has never been a factor for David Braben – his latest game is a follow-up to a fondly remembered title which first saw the light of day ten years ago, in the heyday of 16bit home computing...

In an industry where sequels are habitually in development before even the originals are released, ten years is an unusually long time to wait for a follow-up. But then again, David Braben is not your usual developer. Forever associated with the seminal *Elite*, Braben found himself overshadowed by his first commercial effort's runaway success. He went to ground, surfacing in 1988 with *Zarch* on the unfavoured 16bit Acorn Archimedes. A swift name change later (the *Zarch* moniker was the choice of Acorn, which liked the way it echoed the 'arch' of Archimedes), it was released as *Virus* across sundry 16bit and 8bit platforms. One of the first games to use filled polygons successfully, *Virus* had the potential to be a landmark title like *Elite*; but many players found its 'unique' flight control system unpalatable, and *Virus* never matched its forebear's grip on the games industry's consciousness.

'That was one of the reasons why I didn't want to follow it up for quite a while,' Braben explains to *Edge* as he sits sipping a coffee at the kitchen table of the farmhouse home of his company, Frontier Developments. 'There were a lot of problems with the original *Virus* that I wanted to address but I wanted to move it forward, to distill what I liked from the original and throw everything else away.' Braben's frankness about the faults in his own game is a characteristic departure from the norm – the hard sell and hype that comes rattling from the mouths of many developers like coins from a slot machine paying a jackpot win.



This volcanic level is demonstrative of the game's level of variety – a harsh contrast to the fairly uniform feel of the original

'The trouble is,' he continues, 'though some people loved the original, many others didn't share those feelings.' The main barrier to a loving relationship was the aforementioned flight controls – a thrust'n'hover technique that was hard to master. 'The detractors would pick up the game, fly the ship up in the air, turn upside down, then die and get pissed off,' he adds. Despite this, the controls remain largely the same, but have been redesigned to give a more approachable learning curve. 'It still feels like the original to fly,' he contends, 'but if you let go of the controls, you won't crash, you'll just fall to a nice hover.'

The controls may have made the transition almost intact, and the scenario still pits the player against an alien force spreading a virus across a series of levels, but there the similarities end. Now the

player has to protect a human population – but they can, not so compassionately, choose to enslave the populace in factories in order to manufacture ship upgrades. And instead of the primitive, abstract levels of the first game, the player now has a variety of terrains to explore.

Medieval worlds, where the humans live mainly in monumental castles, are wreathed in mist, drastically reducing visibility – a deliberate feature put in by Braben to enrich both the atmosphere and the gameplay. By contrast, the dense jungle worlds are dark, illuminated only by pools of light spearing through breaks in the tree canopy. With some beautiful



Frontier is based in a farmhouse just outside of Cambridge. Gem the dog would no doubt attest to the company's relaxed atmosphere...

shoals of fish and predatory rogue sharks, the undersea levels have an authentic feel – a realistic buoyancy for the ship to contend with and a murky look, with less light the deeper the player goes. Then there are

Braben's frankness about the original's flaws is a characteristic departure from the norm – the hard-sell and hype that issues from the mouths of many developers like coins from a slot machine

deserts, icecaps and the more exotic alien home worlds at the climax of the game.

The levels themselves make up a central core of worlds leading on from one another, but, claims Braben, 'it's much less the rigid, level one to level two to level three, all the



Skeletal pterodactyls inhabit the skies of this rock world (apparently inspired by the Arizona desert), with giant spiders lurking in the gulleys





Enthusiastic co-operation between design and programming staff has infused creatures like this scorpion with some truly lifelike motion

way to the finish. That's a bit unimaginative.' *Virus 2000* has more concealed worlds than 'open' worlds that are accessible by the conventional exits – and all the worlds are interconnected, making for a much more unified playing environment. 'For example,' says Braben,



When it comes to deadlines, David Braben belongs to the 'it's finished when it's finished' school of thought. If only more developers took note



Flying over ground (left) will be familiar to *Virus* fans of old, but taking the craft from the new game underwater (right) will totally change the rules

'on one of our levels is a hidden exit which is quite obvious, and once you've discovered this you start to think, "Hmm, I'm sure I saw something like that earlier."'

But the most fundamental and far-reaching change from the original is in the enemy aliens, as Braben outlines. 'Rather than going for machines as the baddies, which is so hackneyed now, we've gone for animals, for an organic feel.' This simple design decision resulted in most of the technical and creative challenges that Braben's team have faced in the development of *Virus 2000*. For project manager and lead programmer **James Dixon**, it's the key to the game's success. 'We thought it would be nice if the creatures had a little expressiveness, if they could co-operate together,' he says. 'But I'm not sure how realistic any of us thought that was.'

The results are truly impressive – a set of creatures that act and react in a fashion closer to nature than any game has previously managed. 'We've tried to get everything looking organic,' says Dixon. 'Heads look around, the spiders have bouncy bodies... it's a kind of surreal realism. They're not machines, they are creatures attacking you.'

There's firm evidence of this early on, in a canyon on one of the game's desert worlds. At the bottom of the canyon, in a pit, lurks a group of giant spiders, all clambering over each other and scurrying in circles, frantically trying to escape and get at the people and settlements the player is protecting. Creatures work together too – larger monsters will break down fences and barricades, enabling smaller creatures like ants to trail through these gaps and overrun the player's lines of defence.

Some of the creatures, such as the simpler flying insects, are common features across all worlds. Others, like the shark and the dragon, are specific to certain environments. One of the chief delights in *Virus 2000* is seeing how the individual creatures act, and then learning how to deal with them. Even a deceptively simple giant woodlouse poses a problem; when attacked it will sit flat, protected by its armoured shell. The only way to deal with the creature in this state is to employ some of the more advanced weapons, getting at its vulnerable underside with a bouncing

***Virus 2000* has more concealed worlds than 'open' ones that are accessible by conventional exits – and all the worlds are interconnected, making for a much more unified playing environment**

bomb or napalm-style liquid fire.

Work on the creatures has been a process of give and take between the technical and artistic staff, according to 3D designer **Aggy Finn**. 'A lot of the creature movements came about from going to James and saying, "Can we do this?", and him going, "Hmm... yes, I suppose we could." And so we'd design a shape and then the code comes along to drive it, and if it works we do loads more of that style.' This proactive process has led to the team incorporating far more elements into the game than they first envisaged – the hidden levels concept and much of the complex creature interaction only came about in this way.

The latest 'discovery' that Braben and *Virus 2000* team made was another result of this cross-pollination. A programming aid was put in to enable the designers to control the creatures using the ship's controls, just so they could check that the animation worked. Braben and the whole



The dragon, one of the most visually accomplished enemies in the game, has just caught the player's craft with a deadly breath of fire. The excellently implemented dynamic lighting adds immeasurably to the atmosphere in this nocturnal level

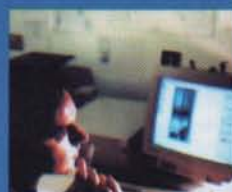
team were so excited by the results that they're now trying to figure out how to incorporate the feature into the finished game.

Although the majority of development has been undertaken on the PC, Frontier is also aiming to get a PlayStation version ready for the same launch date of June 1998. To keep the level of detail on the console as close to that of the PC as possible, they're hoping to use the highest resolution display available on Sony's machine: 512x512 – something that no previous PlayStation title has achieved. SCEE has done its utmost to help, technical director **Jonathan Roach** explains, but he admits the Frontier team have set themselves a challenging target.

'The main problem with hi-res,' he says, 'is that you have to get the hardware to draw absolutely everything in a single V-sync, which is a 50th of a second. Because our scenes can get quite complicated, this puts an extreme strain on the hardware and what you end up with is it drawing short.' The other problem facing the team is that there's precious little time for rendering on the PlayStation, so everything must be prepared beforehand. That in turn demands an enormous amount of the available RAM. Braben still doesn't know if they'll crack these problems, but assures

Edge that it'll use 'one of the high resolutions, anyway.'

To look at the determination to push the PlayStation as far as it'll go, and the effort put into the creature shapes and code, one could be forgiven for thinking that Braben's goals are primarily technical or visual. But



From top: Frontier Developments' James Dixon, Gary Bickmore, and Aggy Finn



Castles and fortifications in the medieval-flavoured levels are immense in scale, dwarfing the player's ship as it prepares to negotiate its structures

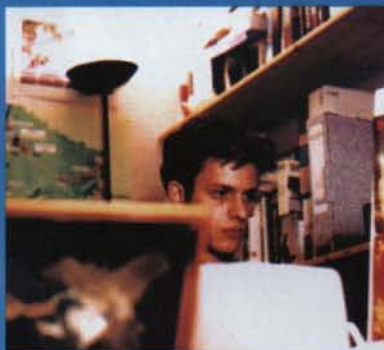


The breadth of vision that unfolds in *Virus 2000's* numerous levels is staggering; from cold, damp medieval landscapes with dragons hovering in the sky to murky underwater environments inhabited by shoals of vicious predators, great effort has been put into developing a complex, organic game world

◀ that couldn't be further from the truth. 'I think gameplay is more important,' he stresses, 'then you just make it look as good as you can.' It's Braben's own philosophy of good game design that has dictated – or at least guided – the way *Virus 2000* has progressed.

'The game designers that I have a lot of

respect for are prepared to take the time to put a lot of beautiful stuff in,' he declares. 'Peter Molyneux was roundly criticised when they slipped on *Dungeon Keeper* but it was definitely the right thing to do. Similarly, hats off to Nintendo for holding their machine back until the games were ready. Christ, that was a brave thing to do.' For Braben, 'beautiful stuff' is the collection of elements that make a game world a convincing, organic place where discovery is a constant delight for players. *Virus 2000* brims over with such flourishes – from boulders that players can dislodge and use, à la Wile E Coyote, to bowl over the aliens, to natural 'plug holes' under the sea that can be blasted to lower the sea level.



Mark Cox (top) and Jonathan Roach: two individuals hand-picked by David Braben in order to build a team to engineer truly cutting-edge 3D graphics and gameplay

'The game designers I respect are prepared to take the time to put a lot of beautiful stuff in. Peter Molyneux was roundly criticised for *Dungeon Keeper* slipping, but it was definitely the right thing to do'

'One thing that people have to understand,' Braben affirms, 'is that games are fundamentally there for people to have fun with. I think Shigeru Miyamoto knows this. It's not a competition between the programmers and the player. What I loved with *Mario* was when you realised there are all sorts of hidden bits.'

But, **Edge** suggests, how many games have tried to ape the great Miyamoto-san's work and caught only the veneer not the substance? 'The problem is, it takes time,' he opines. 'We see a lot of imitative games that bill themselves as like X, Y or Z but actually they're only superficially like them. They don't have the beauty or the consistency – that takes time.'

Time is one commodity that Braben likes plenty of. It took five and a half years' graft for him to produce *Frontier*, the follow-up to *Elite*, and while development on *Virus 2000* hasn't been in motion for anywhere near as long, nothing, it seems, has been rushed or hurried. And from what **Edge** has seen of the game, *Virus 2000* shows absolutely every sign of living up to the pedigree of its illustrious predecessors.

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The year 1997 certainly started with an air of optimism and energy. Tantalising glimpses of what could be achieved on Matsushita's M2 were beginning to

emerge, Sega had lined up a potentially lucrative deal with Bandai,

Microsoft unveiled its plans to storm the world of the coin-op, and

Final Fantasy VII launched in Japan after an agonising wait.

With the benefit that hindsight brings, it is now clear

that only the latter event had any real significance this year.

The M2 was dead by the summer, closely followed by that

Sega/Bandai merger, and PC technology is yet to make

significant headway in the arcade market. *Final Fantasy*

VII, however, has grown to be one of the biggest-selling

videogames in history – and not without its due.

Ultimately, then, 1997 was a year for games, not for

big company shuffles and hardware wars. With this in

mind, Edge has compiled a series of awards to celebrate a

vintage year for the software industry. As with all awards,

the following is bound to be controversial; indeed, many of

the conclusions herein were only reached after hours of

vituperative debate. What this *does* show without question, though,

is that 1997 was a year that saw the industry in creative top gear.

As for the future, Edge also seizes this opportunity to make its

predictions for 1998. Another foolhardy endeavour...

DAVID BRABEN

MD, Frontier Developments



What was your favourite game of the year?

I think the last year has been very light on good new games – ones that have really appealed. We seem a little snowed under with hugely derivative stuff. *Dungeon Keeper* was pretty good looking, although I haven't had much time to play it. I probably shouldn't admit that I enjoyed some of the really tasteless things in *Grand Theft Auto*, but the novelty of that pretty soon wore off. Some elements of *WaveRace 64* were particularly nice. I guess my vote would probably go to *Dungeon Keeper*.

What was your best experience of the year?

Probably walking in the Rocky Mountains in Canada.

And your biggest disappointment?

I assume you mean relating to games! Not sure. There is the huge proliferation of 3D cards, each with different qualities and different problems. This is becoming a bit of a support nightmare, and it is by no means obvious which a user should buy. A year or so ago PCs appeared to be getting easier to install games on and to get running reliably, largely because of Win 95. I hoped that the entry-level price of PCs would go on dropping, but the add-on card brigade have both hiked up the price and made setup a problem again, perpetuating the PC's status as a techy machine.

What are your plans for next year?

To release *Virus 2000*!

What are you looking forward to in 1998?

Relating to games, *Zelda 64* should be interesting. The N64 really needs another killer title if it is to gain some ground against the PlayStation.

Which piece of new hardware are you most looking forward to?

Difficult to say. I think the exciting stuff is all secret.

BEST VISUALS

GOLDENEYE

Rare
Nintendo 64

Rare's masterpiece presents a world to the player which is totally believable and utterly immersive. Perhaps the most convincingly realistic graphics to date.



STARFOX 64 (LYLAT WARS)

NCL • Nintendo 64

Intense explosions mix with wonderfully detailed texture-mapping and some huge 3D models to create an extraordinary spectacle.



FINAL FANTASY VII

SquareSoft • PlayStation

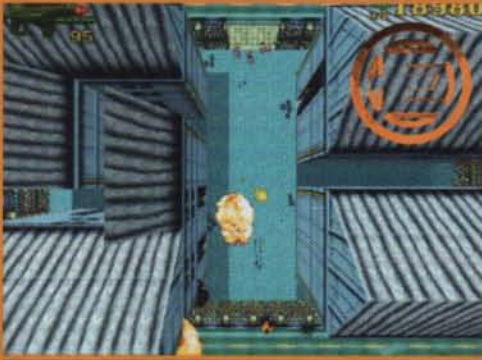
Atmospheric prerendered sequences combine with highly competent 3D modelling to create the ultimate work so far of the CD-ROM age.

BEST SOUND/MUSIC

GTA

DMA Design
PC/PlayStation

DMA's musicians have done exactly what should be done with a CD-ROM soundtrack: written reams of imaginative, relevant, professionally engineered tunes.



STARFOX 64 (LYLAT WARS)

NCL • Nintendo 64

Plenty of sampled speech and a thoroughly stirring musical score give this game an aural punch that belies its cartridge-based nature.



FINAL FANTASY VII

SquareSoft • PlayStation

Another lush cinematic score, including some glorius chip-generated tracks – a genuine rarity at a time when CD-ROM fights its development

MARTIN HOLLIS

Producer (GoldenEye), Rare



What was your favourite game of the year?

Time Crisis is probably the most enjoyable game this year – it's a triumph of hand-to-eye coordination and intense visceral action. It entertains the eye, hand and lower brain like no other.

What was your best experience of the year?

The popular and critical success of *GoldenEye*.

And your biggest disappointment?

The review in 'Empire' [see: Out There, E53].

What are your plans for next year?

Bettering *GoldenEye*.

What are you most looking forward to next year?

Zelda 64.

What hardware are you most looking forward to?

The Nintendo 256. Only kidding. Or am I?

DAVID JONES

MD, DMA Design



What was your favourite game of the year?
I will have to go with the flow here and say *Red Alert*. I clocked up umpteen hundreds of hours, but only on multiplayer.

What was your best experience of the year?
Finishing *Grand Theft Auto*. Being happy with it! Seeing the reaction to it!

And the biggest disappointment?
Blade Runner. After playing it for a few days it offered nothing new as far as this type of game is concerned. Gorgeous visuals, but in essence just a bog-standard take on any classic LucasArts adventure you'd care to mention.

What are your plans for next year?

To ensure we keep delivering originality in games. We have some great new PC titles in development that are certainly different. *Tanktics*, our next PC game, is highly unique and fun. We're looking forward to seeing the reaction to it.

What are you looking forward to in 1998?

I am really looking forward to seeing *Unreal* ship. *Blade* looks stunning, and *Star Craft* should be occupying a fair proportion of my time – well, hopefully.

Which piece of new hardware are you most looking forward to?

Aahh... 3Dfx2. I want two of these in my machine.

BEST ARCADE GAME

GTI CLUB

Konami

Konami's return to form took the rules laid down by Namco and Sega and threw them out of the window, creating a new kind of racing game and reviving a very stale genre.



TOP SKATER

Sega AM3

Amongst a plethora of novelty cabinets, *Top Skater*'s innovative skateboard interface stood out as more than just a way to attract the eye.



TEKKEN 3

Namco

This made small but profound adjustments to an ground-breaking series, and remained the most popular coin-op in Japan all year.

MOST INNOVATIVE GAME

GTA

DMA Design
PC/PlayStation

It was a surprise just to find a title that wouldn't snugly fit in a genre pigeonhole. *GTA* exudes anarchy and invention in a way other games can only dream about.



GOLDENEYE

Rare • Nintendo 64

The firstperson shooter has been done to death, but this game takes the basics and adds layer upon layer of compelling new concepts.



DUNGEON KEEPER

Bullfrog • PC

After months of delays and several rewrites, the world was beginning to wonder if Peter Molyneux had lost his touch. He hadn't.

DAVE PERRY

MD, Shiny Entertainment



What was your favourite game of the year?

Fooling the deputy editor of *Edge* by showing him a photo of the 'Baywatch' girls with the Shiny office Photoshopped into the background [Simon Cox is now PR director at Shiny].

What was your best experience of the year?

Having all my Playstation and Nintendo 64 games stolen from my house – I can spend all the insurance money on new games.

And the biggest disappointment?

That they didn't steal any of my Saturn games.

What are your plans for next year?

To finish a game.

What are you looking forward to in 1998?

Dual. It's going to be great. It would also be nice to get a look at the PlayStation 2 plans sometime.

Which piece of new hardware are you most looking forward to?

A PC that works.

FREDERIC SAVOIR

Co-founder, Amazing Studio



What was your favourite game of the year?

Quake 2... It's really how the new generation of 3D engines will look like. It's really good on my K6-200 with a PowerVR (PCX2). And at least the enemies are smarter than those in other *Quake*-likes. I hope Microsoft will offer more OpenGL support on its new Windows platforms.

What was your best experience of the year?

To play *Diablo* on Internet with my friends. It's fun, and very intense.

And the biggest disappointment?

Not to see *Heart Of Darkness* on the shelves.

What are your plans for next year?

To make sure PlayStation and PC *Heart Of Darkness* finally hit the shelves.

What are you looking forward to in 1998?

Games that are more innovative - we're all tired of C&C-style titles. I'd also like to see better PCs, with faster CPUs, more memory bandwidth, greater bus speed, and 64Mb RAM as standard. And all easier for novices to get to grips with.

Which piece of new hardware are you most looking forward to?

An outstanding 2D/3D card! Something as good as *Virtua Fighter 3* for less than \$150.

OFFICE FAVOURITES

GOLDENEYE

Rare
Nintendo 64

A fourplayer option that brings the sublime thrill of multiplayer firstperson action to a console at last. *Edge* has lost hours, if not days, to this frantic gunfest.



CASTLEVANIA: SOTN

Konami • PlayStation

Konami's masterpiece took *Edge* back to the days of brilliantly structured platformers such as *Super Metroid*. A truly epic 2D adventure.



MOTO RACER

Delphine • PC, 3Dfx version

One of the first titles to exploit 3Dfx properly, *Moto Racer* skillfully broke a PC developers' tradition of creating poor *Daytona* clones.

BEST GAME OF 1997

GOLDENEYE

Rare
Nintendo 64

GoldenEye has more atmosphere and detail in its option screens than most games manage in their entirety. The best movie conversion of all time. Essential.



FINAL FANTASY VII

SquareSoft • PlayStation

The word 'epic' is often misappropriated in this business, but *Final Fantasy VII*, with its simply immense storyline, truly deserves the accolade.



STARFOX 64

NCL • Nintendo 64

Beautiful visuals and astounding effects are often used to hide deficiencies in gameplay. Nothing could be further from the truth here.

1997: THE EDITED HIGHLIGHTS

Edge sorts the men from the boys in a brief guide to the year which brought Tamagotchi, but forgot M2

WINNERS

3Dfx - for making its 3D technology as essential to the PC gamer as Win 95.
Rare - for releasing two astounding N64 titles in the space of 12 months.
The Lara Croft marketing machine - for getting her on the cover of every single kiddie videogame mag, as well as *FHM*, *The Face* and, most bizarrely, cynical music weekly *Melody Maker*.
Sony - for putting 20 million PlayStations in homes throughout the world and giving the videogame industry a much-needed keep up the arse.

LOSERS

Philips - for dropping out of the videogame industry early in '97 after five years of touting the CDi to an uninterested public. The company then had the cheek to return a few months later with - gulp - a head-mounted display unit.
Scavenger - for stealing the entire videogame talent of Scandinavia (and some from elsewhere) and then squandering it with a series of mediocre titles posturing as technological marvels.
Matsushita - paid 300 \$100m for M2 only to handle its inception with all the finesse of one-legged man in an arse-kicking competition. After months of launch delays, the project was cancelled, leaving many developers high and dry.
The Sega/Bandai merger - fell apart at the last moment officially because Bandai's middle managers were unsure of the arrangement. The real reason, many speculators have insisted, was that Bandai made billions out of its Tamagotchi and therefore felt no qualms about ditching Sega at the altar. That's business...



1998: EDGE PREDICTIONS

So what does next year hold in store for videogaming? Edge takes a wild stab in the dark...

GET READY FOR...

The death of the Saturn
As Sega concentrates on the sequel - due for the end of '98 - the original machine is, inevitably, going to be neglected. Expect thirdparty support to grind to a halt very soon indeed.

More SNES revivals on the N64
Watch in amazement as NCL plunders its archives for yet more classics. The gaming public will inevitably lap them up.

Windows '98
The launch of the latest Microsoft OS is likely to be the most hyped event of the year. Bill Gates will get constant media coverage for a week, giving him another chance to bore the world rigid with his asinine visions of the future. **Censorship**
Is Britain heading the same way as Germany? Will games begin to feature green blood instead of red and robots instead of human enemies? Considering the ill-informed moral furore which blew up over GTA and Postal, it's terrifyingly likely.

DON'T HOLD YOUR BREATH...

Original ideas
With marketing budgets going through the roof, few publishers - and therefore developers, to a degree - can afford to back an interesting outsider. Roll on more racing games. **Sony and Nintendo taking quality control more seriously**
Of all of the titles available on each console, just how many are actually worth shelling out for? **The Lara Croft backlash**
Much as many people would like to see it, the insufferable femme fatale is likely to remain just as popular in '98. Expect a film, an album and no doubt an OBE if the nation's fawning reverence gets any worse.



MOST DISAPPOINTING GAMES OF '97

BOMBERMAN

HudsonSoft
Nintendo 64

The N64 deserves a much, much better translation of this classic game series. *Baku Bomberman* manages to get so many things wrong that it's painful.



RAPID RACER

SCEE • PlayStation

The hi-res visuals are fantastic, but all they do is dress up a host of gameplay shortcomings and inconsistencies. Could have been a classic.



MARIO KART 64

NCL • Nintendo 64

Edge has played it to death, but cannot help preferring the 1991 original. It's not quite the failure some SNES apologists make out, though.

MOST PROMISING GAMES OF '98

ZELDA 64

NCL
Nintendo 64

Journalists returned from Shoshinkai open-mouthed and full of lavish praise for this potentially incredible RPG adventure. The final nail in the 32bit coffin lid? Perhaps...



METAL GEAR SOLID

Konami • PlayStation

Screenshots and gameplay details have been enticing Edge readers for months, and word has it that this could be the finest PlayStation game of the year. Capcom may not agree...



RESIDENT EVIL 2

Capcom • PlayStation

... because playable demos of its zombie adventure sequel have been eminently promising. But will there be enough new ideas to distinguish this from its predecessor?

DID I REALLY WEAR THAT?

1997'S GREATEST SARTORIAL ERRORS



Perhaps Perceptions MD Andrew Whittaker fancied himself as the Eddie Izzard of videogame development when he donned a pair of tights for a publicity photo.



Members of the press who speculated for weeks over why Ulrika dumped Hunter obviously never saw this acutely embarrassing Turok promo picture.



Edge has no idea who this poor fellow is, but sincerely hopes his stint as a 'Giant Scot' at May's E3 show didn't end his modelling career once and for all...

METAL S O L



Yoji Shinkawa (front), Hideo Kojima



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EDGE

Direct from Konami's new development facility in Tokyo, Edge presents an update on what is shaping up to be the biggest and most spectacular PlayStation game of 1998





For a company that followed its '80s arcade success with a string of triple-A titles on 8bit and 16bit machines, Konami's recent period of relative anonymity is disquieting. Despite the indisputable quality of titles such as *ISS*, the company has yet to release a 32bit or 64bit product capable of generating quite as much interest among the gaming public as the SNES version of *Contra* did in 1991.

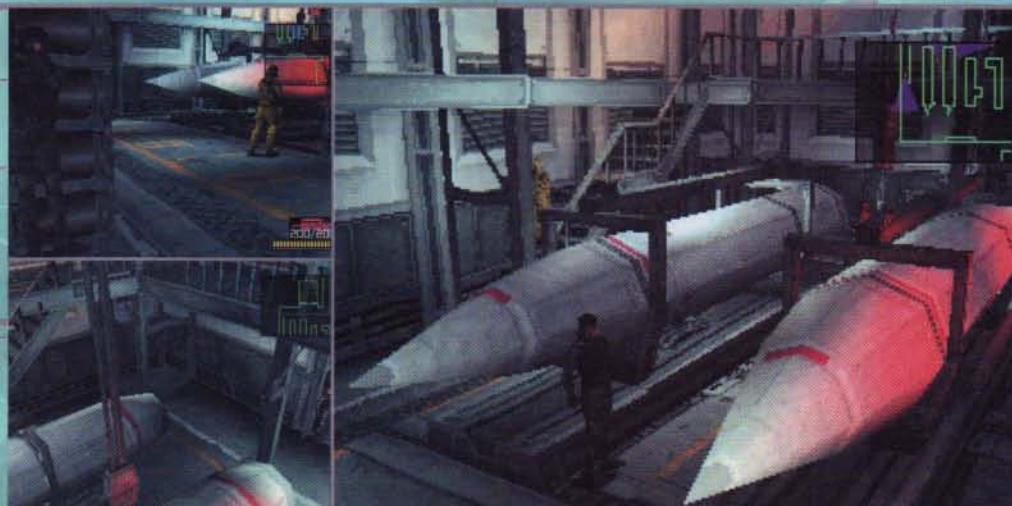
Metal Gear Solid may well be the game to change all that. First previewed in *E46*, this espionage action adventure has become one of the most eagerly awaited PlayStation games of 1998 and, judging by the latest indications, everything would seem to confirm those lofty expectations. Indeed, things would seem to be pointing in the right direction for the Japanese company, a fact which is reflected by its recent installation of a team in Tokyo's fashionable Ebisu district. *Edge* recently caught up with **Hideo Kojima**, *Metal Gear Solid*'s director and producer, and was given an exclusive tour of Konami's spacious new pad on the sixth floor of the Ebisu Garden Place, a building it shares with the regional divisions of several major US and European companies.

Although it didn't make it to the west, *Metal Gear*'s first appearance in July 1987 on the MSX2 was very well received in Japan, spawning a sequel the following year (for those not blessed with a military background, the title refers to a nuclear missile-launching tank – a major threat during the Cold War). Apart from the obvious visual improvements, the principal difference between the forthcoming PlayStation version and the game's early incarnations is the introduction of a 3D environment within which players are allowed to roam freely.

Little has changed in the plot since *Edge* first saw the game. It's still set in early 21st century Alaska, where a warehouse full of US-owned, nuclear-tipped missiles has fallen into the hands of FOXHOUND – previously a government-controlled, anti-terrorist organisation engaged in covert operations, now a volatile renegade group made up of genetically enhanced soldiers. When FOXHOUND threatens to detonate the warehouse's contents all over US soil should the government fail to meet its demands, an ex-FOXHOUND member named Solid Snake is sent in and given 24 hours to infiltrate the besieged facility.



The firstperson view can prove particularly dramatic



Given the nature of the objects within the warehouse, players should think carefully about where to stick explosive charges



D

Given the vast number of enemies that must be neutralised, this is no easy task. Initially, Solid's relative inexperience and low level of protection make face-to-face combat a hazardous occupation. As a result, until players have built up Solid's strength as well as acquiring more powerful weapons and equipment that offers a superior degree of protection, terrorists are best disposed of using an effective and silent attack method.

The stealthy approach remains the most effective offensive option as the game progresses, simply because any more clamorous tactics attract the attention of unfriendly forces. Essentially, this requires players to use their surroundings as cover – hiding in vehicles, crouching behind crates, using the warehouse's air duct system – in an attempt to outwit the terrorists, guard dogs and ever-vigilant security cameras that maintain a watchful presence, ready to sound the alarm the moment they catch a glimpse of Solid. Should combat become inevitable, players have full control over the action, choosing whether to shoot the enemy – or to punch, choke or hit him with the butt of the weapon for a more discreet but just as effective takedown. Players who prefer to go in with guns blazing will be pleased to note that Konami has recreated a variety of real armament as well as some suitably futuristic examples, all boasting some impressive effects when fired.

Of equal importance to Solid's survival is the ability to obtain items and information that may help avoid traps and enemies. For example, a radio transmitter allows communication with some of the characters that are encountered within the game, and IR goggles prove useful when trying to determine the location of infrared beams. Additionally, any freed



The auto-mapping device (shown in the top right corner of the screen) reveals the enemies' field of vision

hostage will usually reveal a few crucial facts to assist players in their continuing mission.

As to the structure of the game, most of the action occurs within the confines of the weapon depot, although players are occasionally required to venture into the snowy Alaskan outdoors. Currently, the game seems to reject a structured level approach in favour of a more open, film-like experience, with different-sized floors and sub-missions which sometimes only require seemingly simple tasks, such as locating and scaling a radio tower, for example.

Recently released *Metal Gear* video footage has shown Solid Snake in the thick of action with the help of a female companion – and the eerie presence of a camouflaged adversary. Thankfully, the game runs at the same speed as the antics portrayed in the video, although the camera is considerably less dynamic (it was exaggerated for dramatic effect) and the switch from first to thirdperson cannot be achieved in realtime due to the PlayStation's technical limitations.

However, neither revelation is significant enough and shouldn't unsettle gamers into doubting *Metal Gear Solid's* potential. Konami may well have rediscovered the form of its halcyon days.

E



In order to ensure all of the objects within the game maintained their correct respective proportion, the team built Lego models of the levels and moved an 8mm camera within them



The nature of the game emphasises the need to employ stealth techniques if players wish to make steady progress



producer and director
Hideo Kojima



While visiting Konami's offices, **Edge** took the opportunity to obtain more information on *Metal Gear Solid* from **Hideo Kojima**, the game's director and producer and also the face behind *Policecauts* and *Snatcher*. He's a serious, professional individual who also demonstrates an impressive awareness of other current developments within the Japanese videogame industry.

Edge: *Metal Gear* first appeared on the MSX in 1987, followed by a Famicom version the year after and now the PlayStation. Why the ten year gap?

Hideo Kojima: I wasn't involved with the Famicom version, but there were many things that I wanted to do on the MSX as I liked the machine but didn't have the opportunity as it disappeared from the market. So I kept it in mind and when the PlayStation was released, I considered its specifications before realising another *Metal Gear* title was possible.

Edge: When did work on *Metal Gear Solid* begin?

HK: I first wanted to make a *Metal Gear* game using polygons when I heard rumours about the PlayStation. I've had this project in my mind since about 1994. At that time the main storylines were decided upon and Yoji Shinkawa, the main designer, started to work on the design. But it was only in September last year that work started in earnest. It was the team's first polygon game – myself included.

Edge: Was the transition from 2D to 3D difficult?

HK: It was very difficult. In 3D, the camera management is difficult to implement. You cannot cheat by cutting some scenes, and you always have to offer the most player-friendly view.

Edge: What have you found to be the most difficult part of the development process?

HK: Definitely working with polygons – as it was our first time there were difficulties in grasping some essential concepts. We had to make some models and animate them as well as manage the lighting... We

were worried about it at first.

Edge: Did you experience problems with speed?

HK: Game speed has been constant at 30fps but we did experience some programming difficulties when we began constructing the buildings and adding the characters – some items just didn't work because we didn't get the proportions correct. Doors were too small, tables weren't the right size... Even by using a mock-up it was difficult to build objects whilst respecting the proportion – we ended up using a mini 8mm camera that we moved within a Lego mock-up.

Edge: Technically speaking, how far do you think you're pushing the PlayStation?

HK: We're asking a lot of the hardware, but there is still a little more we can get from the machine.

Edge: Are there things you weren't able to achieve as a result of the PlayStation's technical limitations?

HK: There are always instances where ideas cannot be implemented, and usually the reason is the same: it would prove harmful to the game. We sat down with the programmer at the beginning of the project to discuss what was possible. Many of our ideas weren't real technical impossibilities, but were difficult to implement without ruining the game. For example, we wanted to simulate a 'blur' during combat scenes. Technically, we succeeded – but it was requiring too much processing power, and in realtime fighting scenes it slowed the game down significantly. So in fact we have to separate 'impossible' things into those



As in *GoldenEye* on the N64, the sniper rifle allows Solid to zoom in impressively on enemies from the relative safety of 60 metres away



It is not entirely clear how *Metal Gear*'s camera system will work during the game and whether it will automatically adjust itself so as to offer players the best possible view at all times, particularly during the game's more tension-laden moments

that were technically unachievable and those that proved detrimental to the game. But this is a problem with all hardware. Currently *Metal Gear* has been made taking the PlayStation's capabilities into account. But the present version is still preliminary and will improve. The textures will be nicer, for example.

Edge: The team is quite big – is that a reflection of the importance of this project?

HK: There are about 25 members of staff of which more than ten are designers. At Konami, teams usually consist of less than ten people but I wouldn't really say *Metal Gear* is a special project – rather that Konami is making a real effort with this game.

Edge: Does the team include illustrators? And are they all in-house staff?

HK: Yes, we're using some in-house artists, such as Yoji Shinkawa. He alone is in charge of the visuals, the mechanics, character design and backgrounds.

Edge: How complete is the game at this stage?

HK: It's difficult to say. Some parts, such as the bosses, are finished. We're in the process of linking everything together now.

Edge: Does the game work in a similar fashion to the MSX version? And how is the plot related to the previous *Metal Gear* titles?

HK: The game is based on the same principle – you must avoid being discovered by the enemy – but everything is now in polygons. The player can alternate between a third and firstperson view, which allows different aspects such as the use of a sniper rifle. But the basic game system will remain the same, and if you're discovered numerous enemies will gather and attack simultaneously. Players can make use of the 50 items within the game that are available to them, including six different weapons. The story takes place after the first game. A few old characters will appear but the game will be equally accessible to newcomers – there is no need for the player to be familiar with the MSX version before playing this one.

Edge: Does the storyline offer multiple endings?

HK: There is roughly one big, main story but there will be two different end sequences. Each will carry the main theme – there is no 'bad' ending.

Edge: How many characters will appear in the game?

HK: It will only be possible to play as Solid Snake, but about 20 main characters will appear throughout – both friends and enemies. It will also be possible to communicate with some of them using the radio. As a result, the game's story will retain its linearity yet leave room for subplots and diversions.

Edge: What about the control system – how much of the PlayStation joystick is used?

HK: Every button. The D-pad obviously controls the character; one button allows you to stand up or crawl, another fires the weapons, while the shoulder buttons select them. It's also possible to punch adversaries. The view change is achieved via the item window, as using one button for this proved too difficult. And we're also supporting the analogue controller because I believe 360° control can greatly enhance gameplay.

Edge: The level of realism within the game is impressive – how did you manage to achieve this? Did you use motion capture for the characters?

HK: We didn't use motion capture techniques – instead, we attempted to recreate human-like movements using traditional methods. Usually, by designing the movements in this way, they look a little



The realism, particularly when it comes to Solid's weapon-handling, is impressive, although not surprising given the amount of replica hardware the team has lying around the office...

bit exaggerated. But we wanted the movements to look like that – to resemble an anime movie. So we used a Japanese animation movie specialist and he designed the movements by hand, based on his experience. Similarly, when there is an explosion in the game it isn't an accurate model of a proper explosion. But it is the same with movies, where they use cables, balsa wood and stuntmen to imitate real life. Furthermore, the programmer and designer, like all of the staff, are young. They didn't have a lot of experience in making a game, so they did many unconventional things that professionals wouldn't usually do. In fact, their inexperience forced them to move in a direction that proved advantageous in creating the game's unique atmosphere. We also had an open-minded programmer who was prepared to sacrifice processing power in order to implement some nice visual effects.

Edge: How did you go about researching the game?

HK: For the weapons we consulted a firearms expert, we observed a SWAT team in action, and watched tanks in motion. Some of our team members also fired the weapons themselves. We visited an Auto-Defense Force base last week but it didn't prove so useful [laughs]. Overall, we tried to experience things first-hand rather than consult books and videos.

Edge: What do you see as *Metal Gear*'s chief rival?

HK: Most people seem to see *BloHazard* as the closest competitor to *Metal Gear*. Considering the market, I suppose it's possible that the games could be construed as rivals. But I personally think there's little similarity. I'd like to think that *Metal Gear* is closer to *Zelda* in most respects.



Being detected by an enemy soldier (top) does little for Solid's survival chances and swift action is required before the alarm is raised (above)



Although most of the action occurs indoors, players can venture outside, often at their peril

Reinventing the Nintendo 64

At the recent Space World expo, Nintendo unveiled all manner of N64-transforming devices. Edge plugged in...



Typically, time has proved that any peripheral or add-on for a games system will often struggle to sell in significant numbers. It's a situation that has repeatedly left a bad taste in Sega's mouth due to the failure of its Mega CD and 32X systems; and perhaps more than anything it's a concept that seems to be fundamentally at odds with the entire 'plug 'n' play' console philosophy. Subsequently, pundits

64DD – played host to the original 8bit *Legend of Zelda* a while before a cartridge version appeared. The Famicom Disk System, launched in February 1986, was an attempt to counter rising ROM costs (Famicom disks were roughly half of the price of cartridge games) as well as effort to streamline its software business. Via disk writers in retail outlets across Japan, consumers could overwrite their disks with new titles for as little as ¥500 (£2.50). And, in a

The add-on is a concept that seems to be fundamentally at odds with the 'plug 'n' play' console philosophy

both inside and outside of Nintendo have known that if the 64DD is to succeed, it will need a killer app to sell units. It was anticipated that were *Zelda 64* to be available only on 64DD, this could have provided enough gamers with sufficient incentive to invest in the additional hardware. But now it seems that with N64 sales still struggling, in Japan at least, promotion of the 64DD is a luxury that Nintendo can't afford – *Zelda* is needed to help fight on the home front where cartridges will remain the sole ammunition for the next six months.

Ironically, Nintendo's first dalliance with an external storage medium – a piece of hardware that bore uncanny similarities to the

smart commercial move, the original *Zelda* (see page 101) was only available for the Disk System.

However, despite quality games appearing for the system (*Metroid* first appeared on disk, too), it was a strategy that eventually turned sour, despite Nintendo selling almost two million systems in 1986 and more than double that number by 1990. A combination of consumer confusion regarding a dual-format console, piracy and contractual problems with licensees meant that disks were eventually phased out in favour of cartridges in the early '90s.

Naturally, with only six months to go before the 64DD's launch, speculation is already rife as to whether a similar fate awaits the

64bit equivalent. Certainly, the line-up of software unveiled at Space World '97 would suggest that Nintendo has possibly reviewed its immediate priorities for 64DD with 'creativity' and 'cash-in' being appropriate buzzwords emerging from the post-Space World haze. What does seem clear is that as well as developing its promising *Mario Artist* series, Nintendo has been equally busy capitalising on the valuable *Pocket Monsters* franchise – possibly at the expense of the kind of titles more suited to westerners.

Jez San of Argonaut (a company that has traditionally worked very closely with Nintendo) concurs with this view. 'Rumours have been circulating for a while that recently within Nintendo the main priority has been *Pocket Monsters*, even at the expense of Nintendo 64,' he reveals. 'I heard that they were taking development staff off other games and projects to make sure that *Pocket Monsters* was done on time. Mr. Yamauchi's speech today confirmed that *Pocket Monsters* are foremost in his mind, and maybe this is why the release of the 64DD system itself has been pushed back,' he concludes. Either way, the 64DD isn't scheduled for release outside of Japan any time soon.

So will the 64DD become just an interesting footnote to the Nintendo 64 story? Or will it truly be a platform to open up new avenues for Nintendo gaming? Some of the answers surely lie in the software that will make or break the system's launch in six months' time. **Edge** takes a closer look...



From top: *Zelda 64*, once thought a crucial 64DD title, is leading on cart; *Mario RPG 2* is 64DD-bound; *Mother 3* will no doubt boost system sales; *Sim City 64* looks promising



Nintendo's first effort at an add-on device, 1986's Japan-only Famicom Disk System, fell far short of being the success it was intended to be

MARIO ARTIST SERIES

Nintendo's apparent riposte to Sony's Yaroze is more of an outflanking manoeuvre than a confrontation, changing the boundaries of battle



The two additional devices for use with the Mario Artist suite are the N64 mouse and the video-capture cartridge. Video-in quality is likely to be merely adequate.

Creativity has always been on Nintendo's 64DD agenda. The latest evidence is provided by the new *Mario Artist* titles announced at the Space World event.

Consisting of three ambitious pieces of software that are far better served by the verb 'application' than 'game', the progression from the old SNES title *Mario Paint* is dramatic. While each of the *Mario Artist* titles deals with a specific area of creative activity, the three are complementary and data is intended to be shared between them.

Talent Maker, the first of the series, is essentially a figure-modelling program, featuring all of the expected Nintendo quirks. Used in conjunction with the new video-capture cartridge, *Talent Maker* will allow users to grab images of their own faces and map them onto figures in the application. Finished creations can then be mapped onto preset animation paths, or placed into one of the built-in mini-games.

The second *Artist* title, *Picture Maker*, bears a resemblance to *Mario Paint*. Nintendo's programmers have clearly been influenced by Adobe



Pricing is yet to be confirmed, but the full gamut of *Artist* accessories is likely to require a hefty outlay prior to creativity commencing. A western release is – predictably – only a slim possibility

Photoshop, as *Picture Maker* features some surprisingly high-end tools – including special effects filters, plus a wide selection of brushes and textures. As an added bonus, the animated 3D dinosaurs from the now-defunct *Creator* title (originally developed in the UK by Software Creations) are bundled with the application, and users will be able to alter the standard texture maps.

Last of the applications is the self-descriptive *Polygon Maker*. By using a variety of primitives and

extrusions, polygon models can be easily created and then textured. *Polygon Maker* is probably the most powerful of the *Artist* trio, although the potential for cross-pollination between the three means they should perhaps be treated as one single application.

With a fourth music-oriented title in the works, and an N64 printer rumoured to be in development, the *Mario Artist* series has to be viewed as both a courageous and credible development.



Picture Maker

These screens belie the power of the 64DD's paint package. The shot second from left illustrates the variety of materials on offer. Drawing freehand with a mouse is tricky, never mind trying with a joystick.



Talent Maker

Unadulterated silliness is bound to be an adjunct of *Talent Maker*'s self-sourced texture-mapping facilities. Creative N64 users will be able to place a likeness of themselves in a simplistic mini-game (far right).



Polygon Maker

While the *Talent* and *Picture* modules are fairly light-hearted, *Polygon Maker* is a surprisingly powerful application – as these screens show. Having said that, *Edge* wouldn't relish creating the Mario model from scratch.



64GB PAK

Nintendo's new 64GB Pak allows the transfer of data between an N64 and a Game Boy. It may sound a frivolous concept on the face of it, but Nintendo knows otherwise...

In one of its shrewdest moves in years, Nintendo has created a controller pack which allows the massively popular (in Japan) *Pocket Monster* Game Boy titles to be linked directly to the Nintendo 64.

The first title to utilise the connection is *Pocket Monster Stadium*, which allows data from the Game Boy carts to be uploaded and translated into 3D models. Where favourite monsters were once no more than a collection of statistics and lumpy bitmaps, the N64 cartridge

will render detailed and lively representations. Once up on screen, the various creations can be fought against each other. Animation and graphic effects are better than expected for a title with such inauspicious visual roots.

With support for up to four players, *Pocket Monster Stadium* has all the right credentials to do the same for the N64's popularity as the original game did for the Game Boy – making Nintendo enormously profitable in the process.

E



The 64GB Pak caters for the insertion of individual Game Boy cartridges, rather than a direct connection between the two consoles



Pokemon Stadium

If any title other than *Legend of Zelda 64* can salvage the N64 in Japan, it is this. *Pocket Monster* fanatics (of which there are millions in Japan), will be able to recreate their humble beasts in detailed, colourful 3D.



Pokemon Snap

Perhaps the oddest of all the 64DD titles unveiled at Space World, *Pokemon Snap* invites players to enter a virtual world inhabited by Pocket Monsters – their 'mission' is then to 'photograph' a selection.

N64 HEADSET

The virtual pet leaps several evolutionary rungs

Again created for use with a *Pokemon* game, Marigul and Nintendo's Voice Recognition Headset is a remarkable achievement. Demonstrations of the device were immediately successful, recognising various male and female Japanese voices. The game, *Pikachu Genki De Chu* (which translates as 'Pikachu is feeling great'), creates a virtual pet, and thus far is the only game to use the add-on. While Pikachu is an endearing character and the headset a definite step forward, *Edge* can help but wonder what Nintendo's long-term intentions are for the device. It will be an interesting item to watch...

E

While this initial virtual pet game may appear a lightweight use for the N64 voice recognition system, its use and acceptance will doubtless be watched with keen interest by developers worldwide



In some ways, *Pikachu Genki De Chu*'s environments are similar to those of *Jungle Emperor Leo*. To what extent players will be able to interact with Pikachu hasn't yet been divulged, although the headset's recognition facility seems to cope very well with a variety of voices

testscreen

The definitive monthly assessment of the world's latest videogames

GAMEVIEW

ARGONAUT'S JEZ SAN SINGLES OUT PARAPPA THE RAPPER AS PERHAPS THE MOST INNOVATIVE TITLE ON THE PLAYSTATION.



Jez San is the managing director of Argonaut Software, the UK codeshop responsible for hits (among them *Croc* and *Starglider*) on console and computer formats.

Parappa the Rapper

Parappa is one of the most important new games of the last few years. I praise the guts of the developer who made it, and Sony for funding it. This must have been a very hard concept to green-light.

Take 'Simon', the old electronic melody pattern game, add an ounce of *Frogger* for timing puzzles mixed with 'Rhubarb and Custard' for graphics, add a soupçon of clichéd reggae and out pops *Parappa*, a game that combines music, rhythms and intuitive gameplay in such an original package. It can be picked up by almost anybody – even my friends who can't tell a PlayStation from a toaster were able to grab the joy pad (when I showed them which way up to hold it) and play almost immediately. Worse still, they beat me within just a few minutes of play...

In the sad old non-videogame days we used to while away our long Christmas evenings playing 'Trivial Pursuit' with stiff double vodkas as forfeits. I think this year *Parappa* will undoubtedly be en vogue among partied-out inebriates. Not only can everyone see and hear what's going on, they can react immediately (and loudly) to any mistakes, elevating *Parappa* to the status of a spectator sport.

Although most people think the idea is stupid and vow never to cast their eyes on it, they soon change their mind the moment they give it a go. *Parappa* is the 'Teletubbies' of the PlayStation – enjoyed by wasted partygoing Gen X-ers and pre-schoolers alike. Rarely has a game had such universal appeal.

I had to pick holes in it, I'd say it's too short. Most gamers complete the levels for the first time in an evening, but then you've got all the cool freestyling to keep you happy. And anyway, the lasting appeal of this game doesn't lie in playing to the end, it's about playing it with drunk friends. My other gripes are that you can't tap the buttons along with the rapping, because they don't always match up with the visual button sequences (I know more than one person that tried to play it without watching the screen). I'd also love to see it be multiplayer and have more musical styles – but maybe we should wait for the sequel.

Despite the shortage of levels, it's an uplifting game that leaves you feeling happy to have played it. Okay, so musically it doesn't set any standards, but I loved it. The humour, the animation, the style, the personality – *Parappa the Rapper* has it all.



Parappa the Rapper has no doubt furthered the PlayStation's assault into the consciousness of the mainstream UK's populace, thanks to its appealing graphics and accessible gameplay

Members of the development community should email submissions to edge@futurenet.co.uk

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VIDEOGAMES ON THE EDGE

The games – old, new, whatever – that have grabbed Edge's attention this month



X-Men Vs Street Fighter (Saturn)

Capcom proves that there's life in the old dog yet – and then some. One of the most accomplished coin-op conversions ever has been a constant diversion this month.



Bloody Roar (PlayStation)

After hammering away with the beta version last month, Edge recently received the finished code – and it was worth the wait. Some of the most outrageous moves ever.



Einhänder (PlayStation)

Essentially *Axelay* for the late-'90s, *Einhänder* is one of the most refreshing PlayStation releases in ages (even though it uses some of the oldest themes in the book, ironically!).



San Francisco Rush (Nintendo 64)

Although unlikely to be a mega hit here, *SF Rush* takes a decidedly dodgy arcade game and turns it into an enjoyable and exciting – if slightly flawed – console-based experience.

Quake II



Quake II makes the return of the king – id has once again proved that it sets the agenda for the PC firstperson shooting genre. The game's intense action is helped no end by running the game through a 3Dfx card, making better use of the chipset than any other title to date. That's no mean feat



After blowing off these enemies heads, the flies begin to swarm...

Post-Quake, shoot 'em up freaks have existed in a kind of purgatory, making do with some of the palest imitations imaginable. There was even a question mark over the mighty id Software's ability to hit its previous heights, following inter-company ructions that led to the establishment of Ion Storm and the belief among purists that *Quake* didn't advance the genre as much as previous id offerings had. But *Quake II* demonstrates that, if id has been stumbling through some kind of ordeal, it has emerged twice as strong as before.

The story is thus: as one of thousands of marines sent to combat the evil Stroggos on the alien planet from which they have been waging a fierce battle with Earth, the player is the only one to get there alive, and must reduce the entire Stroggo complex to a shambles. Id veterans might imagine that, in order to do this, it would be necessary to complete a series of linear stages, blazing a trail of dead Stroggos, until, perhaps, some sort

of inner sanctum is reached. But *Quake II* is a lot less straightforward and not at all linear. The game is split into units, with levels arranged around hubs rather than in a chain. Each unit has an overall objective, which typically involves much to-ing and fro-ing between levels, as players perform different tasks in fulfilling that objective. This instantly throws up a new technique: the need to frequently hit F1 to find out what the overall unit objectives and next tasks are.

There are plenty of other techniques to master, too. Whole units can be rendered easier to complete if a stealthy approach is adopted. For example, if a player enters the Jail unit by dropping into the water rather than through the main entrance, a room containing a Berserker will soon be discovered. Shooting him before he can get to the alarm button, and then knocking out a fuse to open the grate in front, it's possible for the players to find many of the Stroggos in the unit with their backs to him.



Quake II features some seriously ferocious foes, each appearing in full polygon 3D form, to excellent effect

There are ten units in all and a number of boss levels (the end ones are particularly fierce). Each unit is more convoluted than any one of *Quake*'s parallel, unrelated game paths, but this is not to say that the full-on visceral thrill has been diminished. Thanks to an hugely updated degree of cunning among the monsters, and some intelligent rethinking of how players must employ their weaponry, it's more intense than ever before. Because each unit demands more skill, thought and involvement than any part of *Quake*, and because players have to do so much in order to make any progress, the sense of satisfaction *Quake II* provides is unprecedented.

Added to this is the game's coherence. Everything hangs together in a manner previously unseen in firstperson PC games. The Stroggos have their story: they're cyborgs and as their human content decreases and the number of machined components in them rises, the more fearsome they get – the ineffective Gunners are almost entirely human, while the Tank is entirely machine. The other Stroggos, who run a perverted sort of class system, look down on the Tank, who's taken to wearing a human face stretched over his own metallic visage.

The Stroggos, more than anything, benefit from the hugely improved physics which John Carmack has built into the latest version of his engine. The days of dropping monsters by shooting in their general direction are gone. Monsters will fall or be pushed back in different ways, according to where they're hit, which requires greater shot accuracy. A head shot will probably put one on its back, whereas a crotch shot will cause it to double up. This, in turn, is mitigated by the choice of weapon so that,



The level designs are often staggering. Few 3D game environments have ever been this complex



Lighting effects are liberally employed throughout the accelerated Quake II, adding much to its atmosphere. The software version also offers a decent level of playability, however

for example, if armed with the hugely powerful but very focused Rail Gun, players can kill a monster with one shot, as long as it's judiciously placed.

Quake II is lent even further depth by the Stroggo's highly developed individual characteristics. Berserkers, for example, though poorly armoured, will try to get in close to the player and chuck them around the room – which inevitably leads to an annoying lava bath. The Brains, on the other hand, use their psychic powers to affect players' vision, so should always be dealt with before any other monsters in the vicinity.

Although the game is tolerable in hi-res software mode (it is disastrously blocky in the default software mode), it really does demand the purchase of a 3D graphics card. PowerVR has now put the finishing touches to its OpenGL drivers, thereby offering an alternative to 3Dfx, but the game looks much duller and loses some of the breathtaking coloured lighting effects when running on a PowerVR-equipped PC. Players wishing to get 100 per cent out of the game will need a 3Dfx card. The more progress is made, the more it'll be appreciated.

Quake II has been hailed as one of the best PC games ever, and it's difficult to disagree with this assessment. It moves the whole *Doom*-style genre forward, skipping at least one entire generation in the process, and is undoubtedly id Software's crowning glory. The thought of what Carmack and co might achieve with *Trinity*, their next release, is almost frightening.

E

Edge rating:

Nine out of ten



Changes to the armoury include the new railgun (above), capable of blasting through several enemies

Einhänder



In one section the player must guide their craft down a vertical shaft, avoiding dangling opposition (right)



Einhänder uses its polygons to create shifts in scale and 3D perspective



Bosses appear at the middle and end of levels, and each one features distinctive and varying attacks

Like aged aunts, side-scrolling shoot 'em ups still pop in occasionally to show their face and ascertain if they're still loved. In these terms, SquareSoft's *Einhänder* is a more rebellious relation whose nose ring, leather jacket and punky stance the family tries hard not to acknowledge at Christmas dinner.

Using all of the genre's classic traits, from massive enemy craft to a plethora of add-on weaponry, *Einhänder* at first seems resolutely old fashioned. Where *Star Fox* took the shooting action and propelled it into the third dimension, *Einhänder* remains, despite its polygonal visuals, trapped in the x and y planes. However, continuing its pattern of making slightly skewed versions of game styles it had previously ignored, SquareSoft's attention to the minutiae of gameplay shines through.

The player controls one of three small craft, all of which are equipped with a basic machine gun, plus a mechanical arm with which to collect additional weaponry. Rather than being gained through a credit system (as seen in past masters such as *Gradius*) or a

series of power-ups, enemy craft actually attack with the extra weapons. Once these foes have been dispatched, the player can add the devices to their own armoury. The variation between the weaponry, in terms of number of rounds supplied, frequency of their appearance, and speed of fire, is extremely well balanced.

Grenades are most effective method of dealing with most enemies, but the supply of ammunition is commensurately limited. The other weapons are typical shoot 'em up fodder, an assortment of bullet and laser projectiles, with the exception of the Blade – an unusual weapon that forms a kind of light sabre in front of the player's ship. There are other subtle touches: one of the three ships is capable of carrying two additional weapons, but doing so disables the standard machine gun. Furthermore, the mounting of these devices is flexible, enabling them to be slung above or below the ship. This is no mere cosmetic touch, and has a powerful bearing on the flow of the game. If positioned above, for example, the Wasp missiles are less powerful but home in on enemies far more effectively.

The best scrolling shoot 'em ups are usually endowed with a fair proportion of graphical pizzazz, and in this department *Einhänder* doesn't disappoint. While the assorted weaponry available (other than the Riot gun) doesn't have quite the retina-searing quality of *Raiden*'s, the explosions are well executed, and some of the foes are almost too good-looking to destroy. Only *Star Fox 64* matches *Einhänder* in the design of its enemies, although *Edge* can't help feeling that even the N64 would be



Action moves through city, ground and sea before the final stages in space. All are beautifully presented



As these screens show, the variety and quality of enemies in *Einhänder* is impressive. While the onslaught is relentless, it is never poorly balanced

pushed in rendering a game world as detailed as SquareSoft has created here on the PlayStation. From the opening stages of the game, set against a nocturnal cityscape, both backdrops and enemies are highly detailed, and feature dozens of lighting effects.

Looking beyond the fresh technical aspects of the game – which are undeniably important in this genre – *Einhänder*'s strongest suit is its innate playability. Too often games of this type overwhelm the player with hordes of rapid-firing enemy craft, making failure to complete a section easy to blame on a game being 'unfair'. Which is not to say that *Einhänder* is easy – SquareSoft has created a formidable challenge, even with the standard game offering ten credits. The end-of-level bosses have unusual, unpredictable patterns of movement and fire that make it impossible for players to slip into a complacent groove and exterminate each one in an identical fashion. Their attack methods, meanwhile, change subtly according to the damage inflicted upon them in a given time frame. Intelligent touches like this make *Einhänder* a pleasure to return to.

Churlish observers might chide Square for failing to include a two-player mode – a feature that is swiftly becoming standard – but given *Einhänder*'s shifting

viewpoint and rarely empty screens, such a mode would be hard to implement convincingly. This niggle aside, *Einhänder* is one of the most accomplished PlayStation outings yet for this genre, and one that benefits from Square's unparalleled storytelling abilities (there's even a neat twist at the end). Once again Square has proved the pedigree of its development teams and breathed fresh life into a long-dormant genre.

E

Edge rating:

Eight out of ten



From the very start, *Einhänder* turns the visual volume up to ten, offering gameplay to match



Bosses change their attack patterns depending on how much damage they have taken, before finally detonating

X-Men Vs Street Fighter



Chun-Li's new super special is stunning to behold. Capcom has created a 2D game with extravagance to rival almost any 3D game, but with well-measured gameplay to match

Like *Marvel Super Heroes*, *XMVSF* places great emphasis on the use of powerful special moves. These can be accessed once a power gauge reaches a set level

standard – players choose two combatants at the beginning of each battle. These can be switched during bouts with the joystick's shoulder buttons. While this appears upon first sight to be little more than a simplistic gimmick, the truth is quite the opposite. The 'tag' system devised for *XMVSF* is a sophisticated and well-designed one, and is sure to be plagiarised by other beat 'em up developers (and continued, no doubt, by Capcom).

The first thing *Street Fighter* aficionados will notice is that the round system has been dispensed with – unsurprising as players are, in effect, fighting two bouts per match. With a little more play, the subtleties of the system become apparent. When a switch is performed, the new fighter leaps in with an immediate attack. Recognising the gameplay-killing potential of rapid changes by cynical players, Capcom has added a compulsory delay for each entrance. After the initial kick, fighters perform their individual character taunt, remaining vulnerable for just over a second. This proves a simple and effective solution to the problem.

Another feature unique to *XMVSF* is the addition of two sections to the standard energy bar. A green fill indicates the actual remaining stamina of a combatant. The red, however, shows the 'potential' health of a fighter; if the character is switched, he or she will steadily regain energy up to this red-hued limit. This encourages strategic play, further distancing experienced players from the amateurs. Most newcomers will simply fight as one character until they drop, while the experienced player, keen to maximise his or her potential energy, will swap characters at the correct time.

Capcom's beat 'em ups have always benefited from the varied abilities of their characters. For example, the otherwise powerful Chun-Li was rendered all but useless

Perhaps it was inevitable that Capcom would run dry of inspiration and hit upon the idea of fusing two or more of its beat 'em up franchises at some point. *X-Men Vs Street Fighter* is probably the first in a long line of 2D fighters that mix elements and characters from previous releases. To cut and paste stock figures and gameplay mechanics in order to create a Frankenstein's *Street Fighter* would have sufficed for Capcom in Japan, where its fighting games are almost guaranteed a rapturous reception. But, in a refreshing break with a tradition of its own creation, *XMVSF* sees Capcom shifting into a more innovative gear. Using a gameplay engine more akin to *Marvel Super Heroes* than *Street Fighter*, huge two-screen jumps and explosive specials are on offer to all four available fighters.

Rather than controlling one character against a solitary opponent – a well-established beat 'em up



Chun-Li's abilities have been vastly improved for *XMVSF*. And rightly so – a *Street Fighter* series stalwart, she was surprisingly weak in her *Alpha* instalment incarnations

by Ryu and Ken's Dragon Punches in the original *Street Fighter II*. Without aerial attacks, Chun Li couldn't compete against an adeptly controlled Ryu, so Capcom gave her a fireball move in a later edition. This steady tweaking of character abilities makes for interesting battles, with canny players attempting to exploit the weaknesses of their opponents. *XMVSF* follows this tradition – substituting Ryu for the faster Cammy once Wolverine makes an entrance, for example. The different permutations are many and varied.

To extol the strengths of *XMVSF* as a game is easy – a fine arcade machine professionally converted – but to neglect the RAM cartridge's contribution to the ensemble would be foolish. The additional 4Mb it affords not only allows superior animation and sound, but peripheral benefits such as a reduction in disc access. That *XMVSF*'s frenzied battles would be awkwardly implemented on a basic Saturn unit indicates the importance of the upgrade.

One (perfectly valid) criticism of Capcom's 32bit beat 'em up franchises is that they all suffer uncomfortable pauses for disc access. *XMVSF*, with the extra resources that Sega's RAM cart offers, all but eliminates this unwelcome intrusion. Indeed, the delay is so negligible during its VS mode that *XMVSF* could almost pass for a cartridge-based game. Capcom's games have long forced multiplayer participants to make idle chatter and generally busy themselves with tiresome social interaction while the Saturn siphons information from a CD-ROM. But no more – and Hallelujah for that.

Capcom's home conversions have always been somewhat parochial. While the term 'arcade perfect' has been used misguidedly in conjunction with lowbrow superlatives to describe past *Street Fighter* releases, the truth of the matter is that they weren't. A simple



Each duo has an ultimate special, where both characters join on screen to unleash their combined Super Combos. This devastating move is, naturally, quite difficult to access

benchmark test would reveal a vast reduction in animation frames, a reduction in sound quality and less fluid gameplay even if casual observation didn't.

If all that suggests an exception to a rule, be assured that this most emphatically is. *X-Men Vs Street Fighter* is the closest conversion of a Capcom beat 'em up on any format, and its seemingly no-expense-spared visual extravagance is little short of astonishing for a home machine. It demonstrates the endless potential of 2D, something most western developers and consumers seem bloody-mindedly determined to ignore in favour of polygonal and FMV eye candy.

Lamentably, with both Sega Europe and SoA stalling over the decision to release the 4Mb RAM cartridge, a western commercial release for *XMVSF* appears less and less likely. This, and the sloppy PAL conversion of *Steep Slope Sliders* (p93), undermines Sega's commitment to these shores. But if there was ever a good reason for Saturn owners to visit an importer, this is it (note that the cartridge requires a converted Saturn). *X-Men Vs Street Fighter* is arguably the finest Capcom beat 'em up on a 32bit machine to date. For Saturn owners, *Street Fighter III* is a very real and exciting prospect...

E



Ryu's fireball abilities have been improved, but otherwise his abilities are similar to those in *SFA2*. Still a safe choice, then...

Edge rating:

Nine out of ten

Mace: The Dark Age



Every fighter can perform the usual series of special moves that are accompanied by occasional impressive lighting effects (above). As beating the CPU-controlled opponents can prove a reassuringly long challenge, mastering a character's full range of attacks becomes necessary



Each of the game's fighting arenas boasts several levels, although they fail to add anything to the gameplay

Despite achieving supremacy in several videogame genres, the N64 is lagging behind other consoles in certain key areas. And none more so than the bloody arena of the fighting game, whose previous contestants – *Mortal Kombat Trilogy*, *War Gods*, *Dark Rift* and *Killer Instinct Gold* – might have satisfied die-hard beat 'em up fans, yet failed to drag the average gamer away from rival formats.

That Atari Games is tilting for the *Tekken* and *Virtua Fighter* audience with this effort is evident in its setting, which is rather more prosaic than previous N64 beat 'em ups. *Mace: The Dark Age* is set in the medieval era, taking 12 contestants from around the world (with an additional two to be 'found') and pitting them against each other in a series of duels. The survivor must face Asmodeus, a ruthless magician and holder of the Mace of Tanis, an artifact capable of restoring order and peace to the contestant's troubled home world.

The control system follows the plot's simplicity by utilising just three of the N64 joystick's buttons for attacking – quick, strong, and kick – while also making use of the shoulder buttons for the purposes of evading the inevitable ripostes. An array of special moves are available, all requiring a combination of button-pressing and D-pad movements which, when married with normal attacks, produce the usual multiple hit combinations.

Indeed, much of *Mace* is standard stuff. Its visuals are pretty without being especially impressive; the combatants are well modelled, with plenty of textures and graphical excess in evidence, but this all comes at the expense of the game's speed. The frame rate is poor, and the animation occasionally jerky – factors which combine

to convey a sluggish feel in the proceedings – and even the lightest characters fail to display the agility and velocity normally seen in 32bit beat 'em up titles.

After several disappointing attempts *Mace: The Dark Age* could and should have been a much-needed kick in the right direction for the N64 beat 'em up scene. Yet it remains mainly unengaging, lacking the finesse and playability of Japanese standard-setting examples. As such, it can prove a soulless, bitty experience – one which, though it'll undoubtedly build a fan base, has only slightly more mass-market appeal than its predecessors on Nintendo's 64bit console.

E

Edge rating:

Six out of ten



Mace offers a commendable variety of detailed fighters but the frame rate hinders their fluidity

San Francisco Rush



Crucially, unexpected diversions and cunningly hidden short cuts add to the sense of discovery

Upon its arcade release, *San Francisco Rush* failed to set any revolutionary precedents in the coin-op industry. Hardly surprising, given the nature of the game – a fast-paced racer populated by gravity-defying vehicles, set in the hilly west coast environs of San Francisco. As a result (and due the fact that as an adaptation of the coin-op a certain similarity is totally mandatory), the N64 version of the game is unlikely to motivate the average gamer into rushing off to procure an N64 with their left-over Christmas wedge.

Yet, in an unusual twist to the formula, this adaptation manages to surpass its coin-op parent in almost every respect, making it a rather fun game to play. Most of the elements remain the same: the eight cars on offer (as well as the obligatory hidden additions) still apply their own laws of physics when it comes to jumps, but there are now more tracks which are reversed and mirrored to offer players 24 possible combinations that can be raced on individually or via a new circuit mode.

Also, Atari has included keys in every track which must be found if the extra vehicles are to be unveiled. Most of these are hidden in and around a circuit's many shortcuts and alternate routes, with some proving fiendishly difficult to obtain, usually involving a colossal, carefully calculated jump over buildings, or time-consuming detours into the edifices themselves. However, realising the difficulty in exploring the surroundings as well as racing to reach the next check point so as to stay ahead of the strict time limit, the developer has included a practice option which offers players the chance to explore their racing environment within a more generous 999 seconds. Further worthy additions come in the form of RumblePak support and an enjoyable – if frame rate-challenged – two-player mode.

Graphically, *SF Rush* scarcely pushes the N64's technical boundaries. The overall look is rather fuzzy and low-res, the car models lack detail, the special effects such as sky and clouds reflecting off their windows only occasionally convincing. The buildings lining the road have a genuinely solid look to them and the action moves along at a very decent rate, although an abundance of fogging is ever present. Amusingly, and in keeping with many other aspects of the game, the latter is tweakable so that players hankering after the *Turok* look can increase the smog factor to its maximum setting.



The vehicles don't enjoy an intimate relationship with tarmac – top a crest and they leap into the air (above, left)

Serious racing game fans will undoubtedly mock *San Francisco Rush* as, upon cresting a hill, vehicles take to the air in a ludicrously unrealistic fashion. Furthermore, the static nature of the vehicles' manoeuvring (which does much to convince players that the cars are constantly floating above the track) is unlikely to persuade them to have a go. Yet *San Francisco Rush*'s strengths lie in its fun factor as opposed to its realism, a fact that is reflected in the simplicity of the handling and controls. Few games allow players to race a VW van, for example, across the top of skyscrapers. And, importantly, given the tracks' numerous short cuts and hidden passageways, every lap needn't be an exact replica of the previous one.

This is neither the best nor the most realistic driving game available for Nintendo's 64bit machine. Nevertheless, given an opportunity to show off its strengths, *San Francisco Rush* is capable of providing surprisingly long-term, arcade-like thrills.

Edge rating:

Seven out of ten



Continuous high-speed contact with walls will turn vehicles into fireballs

Bloody Roar



Bloody Roar sinks its teeth into the player from the very start, begging to be tamed. Even on a PAL machine the action is rapid and relentless



Outrageous 50fps visuals are in evidence. Only *Soul Blade* matches *Bloody Roar* among contemporaries

After the initial explosion of activity during the infancy of 32bit machines, the polygon fighting game genre has been fairly quiet. As though overwhelmed by the quality of titles from Sega and Namco titles (and biting criticism from journalists), other developers shifted almost entirely to creating fighting titles for the N64, where first and secondparty producers have virtually ignored the genre. Therefore *Bloody Roar*, by HudsonSoft, is both an unexpected and pleasant event.

Bloody Roar's unique selling point is that it brings elements of Sega's classic arcade title *Altered Beast* to the fighting game genre. After charging up an energy bar through both landing and receiving hits, the player can activate *Bloody Roar's* 'Beast' mode, changing each selected character into their alternate self – an animal. All share an emphasis on teeth and claws with optional blood effects spattering the arena in fine style.

Mixing control styles from both *Tekken* and *Virtua Fighter*, *Bloody Roar* is easily accessible. Initially the control system seems too simple, with only punch and kick actions available (though there are over a dozen combination moves even at this stage). Once Beast mode is activated several new attacks become available, using an extra button on the pad to enhance the combination patterns. The game takes classic fighting game traits, such as air-juggles and throwing moves, and pumps them full



HudsonSoft has included a wide variety of moves, from simple combos to searing special attacks

of steroids. Not even *Soul Blade* can match it for visual reward: one character's gorilla alter-ego grabs his opponent by the ankle and smashes them on the floor left and right over his head, the action being of the cartoon variety, and just as entertaining on the same level.

Other notable features are the optional 'kids' and 'big head' modes, which change the characters to fit those descriptions. Additionally, the combat arenas are contained by fences but they can be demolished by hammering an opponent against them, allowing ring-outs. *Bloody Roar* has every extra fans of the genre could want, from practice modes to hidden bonus options, which are accessed by defeating opponents. *Edge's* only reservation is that the control system doesn't match the logic and depth of that of *Tekken* or *Virtua Fighter*. HudsonSoft's game is more comparable to *Soul Blade*, and in many ways offers a similar quality of game style and entertainment, which is no bad thing.

Edge rating:

Eight out of ten



***Bloody Roar's* only failing is its inability to match *Tekken's* depth of gameplay. However, there is still enough to reward seasoned fighting game fans**

Steep Slope Sliders



Steep Slope Sliders suffers from a certain amount of pop-up in the distance, but this is reduced during play by the use of a now-familiar fade-in technique. The overall effect is fairly impressive



The tree-filled section of the Italian course (above) is awkward to negotiate – the frequent collisions and consequent pauses also reveal shortcomings in SSS's 3D engine

Where *Steep Slope Sliders* and *Cool Boarders 2* fused in order to make some videogame gestalt, the definitive snowboarding title would be created. Of the two, Sega's poorly monikered effort is undoubtedly the better, but its shortcomings – a lack of near-requisite features such as a multiplayer mode – are as manifest as its superb control method.

Just as *Sega Rally* and *Super Mario 64* have proved inspirational – for their respective genres – in the evolution of on-screen response to control inputs, *Steep Slope Sliders* sets the standard for future snowboarding games. After the wooden movement of *CB2*, *Sliders*' subtleties are a revelation. By using steady left and right movements, players can make their boarder move in a particularly realistic manner. This slalom-style motion is instinctive and enhances play to an extraordinary degree.

With just one exception, *Sliders*' choice of characters don't have noticeably differing abilities – but the experienced player will acknowledge the benefits of certain choices. The Alpine Rider cannot perform stunts but can attain a high top speed, and he's unique in that respect among 16 other selections. This, above all else, reveals where *Sliders* places its gameplay emphasis. While quick times are noted and rewarded, tricks and stunts are its *raison d'être*.

Sliders offers a substantial quantity of tricks, ranging from a simple jump and grab to multipart moves of gravity-defying complexity. It's pleasing to note that the developer has also made provision for stunts that aren't exactly realistic. Being able to flip several times, rotating while doing so, during a drop of many hundred feet is (naturally) a real-life impossibility. But in *Sliders*, acquiring the skill to perform them is part of the enjoyment.



The Alpine Racer boarder is incapable of performing tricks, but has an incredible turn of speed. As a dedicated racing character, he is unique among the game's range of 17 boarders

In another departure from the linearity expected from track-based games, *Sliders* positively invites creative play. Within its boundaries a huge amount of track features can be jumped onto and used in a variety of ways. From an almost impossible-to-mount slide on the Snowboard Park course, to the many rock outcrops of the Italian track, and the option to use snowbanks at either side as impromptu half-pipes, almost every conceivable move is worth attempting.

Sadly, such freedom is not without its cost. At times it's possible to get 'stuck' behind scenery, with endless jumping the only means of escape. But, worst of all, Sega Europe has decided against optimising *Sliders* for UK release. Huge borders and a marked reduction in speed are the unfortunate consequence of this mystifying lack of effort and ambition. Only owners of converted or foreign Saturns will be able to play it at the intended pace – a significant black mark on its report sheet.

Edge rating:

Seven out of ten

FIFA Road to the World Cup '98



Predictably, the game offers night play settings (above). Skillful ball control is more easily attainable in this hugely improved sequel (top right). The indoor mode is a great addition (right)

As an example of biting the hand that feeds and fouling its own nest, *FIFA 64* is hard to beat. This indefensibly sloppy piece of programming left any N64 owner unfortunate enough to be duped by its dubious charms swearing never again to trust the rapidly deflating FIFA brand. And with Konami's *International Superstar Soccer 64* – a game as stunning as EA's was execrable – stealing the show, who could blame them?

Quite how Electronic Arts managed to foist such a laundry basket full of soiled undergarments onto an unsuspecting market will doubtless remain a mystery. But rest assured that with *FIFA Road to the World Cup '98* it's gone a long way towards making amends. Grafting British coders onto the Canadian development team was only the first step towards what is, in every respect, a radically improved experience. Important and valuable lessons appear to have been learned from *ISS 64*, it seems, and the influence of Konami's effort is evident in all areas.

The most obvious departures from EA's previous effort come in the visual department, with the old fuzzy look bootied out in favour of a crisp new suit. Players now exhibit a pleasing sharpness and a slew of non-essential but atmospheric and graceful animations – the way they catch a ball before throw-ins; toss it forward an extra couple of yards for a free-kick; remonstrate with the referee; and celebrate goals is actually better than *ISS64*'s.

A passing game similar in feel to *ISS*'s is also encouraged, though its implementation is less successful. Still, it's refreshing to be able to ping the ball about to feet in *FIFA*, a series normally dominated by aerial challenges and long balls. The complex but manageable control system of taps, holds and double-taps opens up many new possibilities, not least of which is the through ball.



Crucially, new gameplay facets allow players to coordinate a controlled, passing-based match

Certain traditional *FIFA* curses quickly make themselves known, however. The pitch remains too sticky, killing the ball's momentum after one or two bounces, for instance, and if the motion-capture must be sacrificed in order to make the game that little bit more responsive, it's a price most gamers would be prepared to pay.

It's no *ISS* beater, then, but EA Sports has rehabilitated what was becoming a mockery of a license. Together with the respectable PC and PS versions, this N64 outing makes next year's inevitable *FIFA World Cup '98* look an almost palatable proposition.

Edge rating:

Seven out of ten



The most obvious improvement upon powering up is the new cleaner, crisper graphical standard

Ultima Online

Throughout its long and illustrious history, the *Ultima* series of games has become synonymous with computer roleplaying, especially on the PC. It formed the basis upon which Origin Systems was built, has turned its creator Richard Garriot into a multi-millionaire, and has become one of the most consistently successful and innovative game lines ever. The mere mention of the word is enough to pitch avid roleplayers into extended periods of rosy recollections. The influence of the *Ultima* games isn't limited to other computer RPGs, either. Without *Ultima Underworld*, for example, the world of computer games might never have been shaken to its core by *Doom*.

Therefore, when Origin announced that the next game in the series wasn't going to be the long-awaited *Ultima IX* but an online, multiplayer version, expectations were very high indeed. MUDs (Multi-User Dungeons) aren't a new idea – they predate the internet by several years – but previous games of this type had nearly always been text-based, and fairly small in scope. *Ultima Online*, on the other hand, was going to present an entire world to explore, all via a cutting-edge graphical engine.

Now, after more man-years of development than any other game in the series, *Ultima Online* has arrived. And, to fans of either roleplaying or online games, to say it's been worth the wait would be a huge understatement. Simply put, *Ultima Online* is the most ambitious multiplayer game ever published. Origin, at last, has lived up to its tag line: 'We create worlds'.

The sheer scope and size of the game is almost impossible to convey without using the cliché of 'you have to see it to believe it'. *Ultima Online* offers players a vast, detailed fantasy world to explore and enjoy, presented in SVGA graphics and based on a game engine that any singleplayer RPG would be proud of.

It's not all sunshine and roses, though, especially for British players. The biggest problem with *Ultima Online* is the game's sheer popularity. Origin was prepared for a big response, with six separate servers set up across the US, but what it hadn't counted on was the length of time people would spend playing. The result is that not only is the game very crowded most of the time, but the lag can be a killer. At certain times of day, players simply won't be able to connect, and even when they do, the load on the servers is such that they'll often have to put up with significant delays and pauses in the action.

Combined with this are two smaller problems. Just learning how to play and what to do can take a long time, and the game can be initially overwhelming. The second, on the other hand, is more a matter of style. *Ultima Online* allows player killing – that is, players can attack other players in the game. Although the towns have been made fairly safe by the addition of computer-controlled guards, and there are roleplaying penalties associated with random murder, this doesn't stop unscrupulous players from preying on weaker newcomers every now and then, which can be frustrating for those just starting out.

Despite these problems, though, *Ultima Online* is one of the most impressive, ambitious, and absorbing gaming experiences ever, and a real step forward for internet gaming in general – a look at what the future holds, essentially. Provided players have the time needed to play it, and the cash to afford the inevitable phone bills, it's a game unlike any other, and for roleplaying fans, it is, in short, a dream come true.

Edge rating:

Nine out of ten

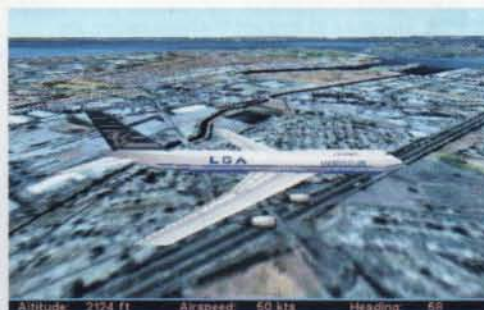


The *Ultima* world is present and correct in this online version, with some attractive SVGA graphics



Players will greatly enjoy exploring the varied environs – providing they don't get chopped down by other users first

Flight Unlimited 2



One of the adventures challenges pilots to land on an aircraft carrier in rough weather (left). Detail on commercial craft is excellently implemented (above)



Even at low levels, the ground textures retain their photo-realistic appeal. Bizarrely, a 3D accelerator doesn't speed up the frame rate much, although the graphics engine is already surprisingly nimble



Each airport has a base of operations, from which players can take a plane out for a spin, plan flights or embark on an 'adventure'

With *Flight Unlimited*, developer Looking Glass Technologies created a game where the flight dynamics of its virtual aircraft provided the sole focus of the game. That it gained such acclaim and popularity is testament to the still unbeaten realism of these physics. Nevertheless, extended play confirmed suspicions that it was lacking in other areas. Solo flight above a tiny stretch of landscape can only entertain for so long, even with the chance to pull off stunts thrown in.

Which is why *Flight Unlimited 2*, even though it too ditches airborne combat in favour of a more leisurely endeavour, has been designed to use the art of believably simulated flight only as a starting point. As much as anything, this is a game of exploration and interaction, where lone pilots never feel alone for very long, and where the vistas outside the cockpit are just as crucial to the sense of immersion as those precious physics. The result is near-flawless.

The average flight simulator often feels like an empty world, created to show off the power of the graphics engine. Not so *Flight Unlimited 2*. The 11,000 square miles of the San Francisco area have been modelled with an astonishing degree of detail (each pixel representing just four metres), with every landmark in place, every building over ten stories high modelled as a solid 3D object, be it a stadium, windmill, bridge or skyscraper. Even the terrain texture hits the spot, thanks to the use of aerial photography, the textures capturing all the road systems and other fine detail. There's no visible pop-up with *Flight 2*'s landscape engine, so everything can be seen from long distances and high altitudes. It's possible to make out downtown San Francisco from 15 miles away and look down on rivers from 50,000 feet. Visual rather than instrument-based flight is a very real option here.

Mixing photo-captured textures and polygon objects can often yield clinical results, but Looking Glass has worked hard to soften the images, using haze as a real effect rather than a distance-clipping cheat; vastly different palettes for the various times of the day; weather effects (including a superb rain-on-glass trick); and, of course, the ubiquitous light sourcing and lens

flare. Even night flights don't escape the latter – this has to be the first game to include moon lensing.

But just as crucial to the *Flight Unlimited 2* experience is the fact that this game not only looks, but also behaves like the real thing, at least in flying terms. Players share airspace with up to 400 other aircraft at any one time, the numbers varying according to the time of day. Flying into restricted airspace may find military aircraft getting a little too close for comfort; cruise low above a commercial airfield and passenger airliners (complete with jokey company logos) can be seen taking off.

Communication with the other pilots and people on the ground is a major aspect of the game, with an intuitive multiple-choice system and some audio splicing replicating real Unicom and ATS air traffic communication systems. Real air traffic controllers have been used to add authenticity, with eight pilot voices for the player to choose from. The constant radio chatter and the need to confer with unseen officials truly brings the game alive.

The player's own aircraft, selected from a choice of five, displays an equal air of believability, with correctly arranged cockpits for each supporting point-and-click manipulation of controls, as an alternative to key presses, and the forced-based flight models (the original *Flight Unlimited* utilised Computational Fluid Dynamics) giving each a unique behaviour. Just as accurate are the failings of the aircraft, such as mechanical malfunction. And if piloting a potentially lethal plane isn't challenging enough, the game supplements the various free flight and user-designed flight plans with over 20 'adventures', ranging from aircraft carrier landings to a foolish but enjoyable Alcatraz rescue of two Mafia hoodlums.

There will inevitably be those who dismiss *Flight Unlimited 2* as dull, simply because it lacks weapons. This would be a mistake, for with its combination of accurate landscaping, believable flight dynamics, and the innovative air traffic communication systems, Looking Glass has succeeded in creating the most believable flight simulation environment ever. Here the interaction with the game world is everything – it's reward enough simply to explore rather than to destroy. Although, saying that, it does rather spectacularly blow Microsoft's *Flight Simulator '98* clean out of the sky.

Edge rating:

Nine out of ten

Testscreen roundup

Zork Grand Inquisitor



Activision's decision to resurrect *Zork*, the mould-breaking text adventure games series of the early '80s, has never really made much sense. The recent *Zork Nemesis* at least contained the sort of classical adventure game puzzles first popularised by the early games, but really it wasn't just the point-and-click graphical interface that set it apart from its predecessors. The characters, story and locations had little to do with the originals and the wit and humour that alleviated the frustration induced by the brainteasers simply wasn't there.

Zork Grand Inquisitor seems at first a similar game, with that 360° wraparound graphics engine and streamlined point-and-click system once again running the show. But the content of this latest escapade positively glows with references to the past adventures, piling self-knowing on to irony, and so coming up with a game that's worthy of the *Zork* name, and yet thoroughly modern in tone and execution. From the Kafka-via-Python tannoy messages from the Grand Inquisitor itself, to the playful ridicule of adventure game convention, this is a game that succeeds in having its cake and eating it – packing in an immensely challenging journey beneath the satire.

It's not a completely flawless update (some puzzles do prove annoying, and the system for manipulating objects and magic always feels clumsier than it ought to), yet such niggles are far outweighed by the sense of fun and wildly imaginative scripting – two attributes which are all too absent from its competitors *Myst* and *Riven*.

Edge rating:

Eight out of ten

Format: PC Publisher: Activision Developer: in-house
Price: £40 Release: Out now

PAX Imperia

If big was beautiful and size everything then *Pax Imperia: Eminent Domain* would have the space-based strategy genre sewn up. The sequel to a similarly expansive Macintosh title, it follows the standard blueprint of the epic empire building game, upping the ante with 16-player support, and game universes featuring 800 unique planets. With much resource management and inter-species politics to attend to, the scope of the game is almost scary.

Which is why games such as the *Civilization* titles and the similarly themed *Ascendancy* take such care to refine the presentation, streamlining the user interface and minimising the need to flip between bewildering screens packed with data. Unfortunately, it isn't quite so careful to mask those hardcore strategy leanings, putting the mathematics on display and revelling in the complexities of a design where even the assignment of space ship components come under the player's jurisdiction. Largely unappealing graphics and a non-cohesive user interface only serve to compound the problem.

Perseverance does bring some rewards, for developer Heliotrope has implemented some proficient opponent AI, and once grasped, the game mechanics are actually weighted rather well. There's even a concession to modernity with realtime battles, though the ability to stop the action and thus treat them in a more traditional, thoughtful manner, suggests that even the programmers realised it represented a weak spot.

Nevertheless, the needlessly clinical *Pax Imperia Eminent Domain* is destined to gain little more than a cult following, particularly on this side of the Atlantic. Here, the uninviting coldness of deep space has been recreated just a little too well.

Edge rating:

Six out of ten



Format: PC Publisher: T+HQ
Developer: Heliotrope Price: £40
Release: Out now

The Reap

It is good to know that while the major publishers continue to eliminate non-polygon games from their schedules, some of the smaller distributors are still willing to take a chance on an endangered species. Hence Take Two's decision to handle *The Reap*: an unapologetically retro title created by the team behind the polished Amiga blaster *Super Stardust*.

To cut a short story even shorter, this is an isometrically scrolling shoot 'em up set over ten different futuristic environments. The story revolves around the player being part of an invading alien army determined to destroy the human race, but this isn't very important. What is important, is the fact that *The Reap* is a very competent old-school shooter that comes packed with tons of weapons, power-ups, secret bonuses and, of course, a huge range of enemy craft.

In fact, within this archaic genre, *The Reap* does almost everything right. The levels are perfectly balanced, beginning with minor onslaughts and ending in overtures of mass gunfire, and the weapons (which can be upgraded by flying over power-ups) are varied and destructive, ranging from Blue Plasma bursts to homing missiles and fizzling Ray Guns. Also impressively varied is the range of enemy craft: throughout the game players are just as likely to encounter airships and bi-planes as they are modern fighter craft, and the undersea levels allow for a plethora of submarine craft to get in on the act.

Meanwhile, in the background, Housemarque has created some staggeringly good-looking scenery. Urban wastelands and derelict factories give way to snowy tundras and deserts – and all of them are filled with detail (huge cog wheels powering industrial machinery, farm animals innocently grazing, etc) to give the foolhardy player something else to look at apart from the waves of vicious enemy fighters.

Ultimately, *The Reap* is unlikely to set the world of videogaming on fire. The prerendered scenery, although very pretty, does look strangely unreal compared to the true 3D domains players have become accustomed to, and anyone who hasn't already been down the avenues of *Zaxxon* and *Viewpoint* in the eighties may remain mightily unimpressed. For aficionados of the lost art of the 2D shooter, however, this offers a compulsive blast and a frenzied trip down memory lane.

Edge rating:

Seven out of ten



Format: PC Publisher: Take Two Developer: Housemarque Price: £35 Release: Out now

Grand Theft Auto

There was a time, not so long ago, when most 3D games appearing on both PlayStation and PC formats had a tendency to look (and usually play) better on Sony's machine, mainly due to its custom chipset's better handling of 3D graphics. The arrival of 3D cards has of course done a lot to redress the balance in the PC's favour, and the gaming public has rapidly got used to seeing PC-accelerated versions outclassing their PlayStation equivalents.

It isn't particularly astonishing, then, to find that PlayStation *GTA* is inferior to its PC cousin. What might surprise, however, is how poorly it compares to the latter. And sadly, to the slight detriment of the gameplay. While the rough, pixelated look of the graphics takes a while to get used to, the slow, jerky scrolling detracts from the game's primary appeal. Somehow careering around cities without a care in the world just isn't as much fun in this version.

The rest of the game remains largely unchanged. The three massive cities are split into two chapters with players required to engage in criminal activities in order to reach a million points before progressing onto the next level. The cars do handle differently, though, displaying a tendency to be more tail-happy than on the PC, yet this isn't a negative quality, merely a case of players modifying their driving style.

Ultimately, PlayStation *GTA* is still highly original and enjoyable, but its technical deficiencies will disappoint those familiar with the PC version.

Edge rating:

Seven out of ten



Format: PlayStation Publisher: BMG Interactive
Developer: DMA Design Price: £45 Release: Out now

FIFA '98

Those who've already read the review of the latest Nintendo 64 incarnation of this world-beating license (see p94) will know that the news, overall, is good. After years of complacency, EA has pulled its finger out, shipped in some British talent and, finally, come up with the goods. The PC and PlayStation versions of the game are probably a better bet than the N64's, if only because neither format boasts a title that can touch Konami's superb *International Superstar Soccer 64*.

The newly crowned champion *Actua Soccer 2* needn't be overly concerned, but Gremilin certainly can't afford to be complacent if this rate of improvement is sustained. The principle credit for this rebirth has to go to the new, more pass-friendly tone, and the sharpened, multi-layered controls. Some typical *FIFA* niggles remain, however. The ball mechanics, for instance, are still slightly too sticky, and the most optimistic of hools tends to grind to a halt after two bounces. Worse, the frame rate of the PlayStation version, which is less than impressive at the best of times, totally grinds if balls are lobbed at goal, and consistently seems to move the ball in discrete units of at least three feet.

Bearing in mind the sheer power of the license and the rich statistical seam in play here (literally hundreds of players from virtually every country's club and national sides are reviewed, rated and suitably gifted), it's easy to get an idea of just how good a product EA could have if it ironed out these now mainly technical creases.

Edge rating:

Seven out of ten



Format: PlayStation/PC Publisher: Electronic Arts
Developer: In-house Price: £40 Release: Out now

Dungeon Keeper: The Deeper Dungeons

Those expecting an add-on pack for Peter Molyneux's devilishly enjoyable monster-management game with a similar level of invention to the original game may well be disappointed with *Deeper Dungeons*, though really it works about as well as any regular level pack can be expected. With 15 new single and multiplayer dungeons, and a bunch of new environment tile designs, it delivers a familiar though worthy selection of new dungeons, with the re-appearance of the irritatingly heroic Avatar to brighten things up, and tendency to introduce the better monsters to the arena far faster.

Bullfrog has also taken the chance to tweak the monster and computer keeper AI, with the almost too-challenging collection of opponents now even trading off doors and other expensive dungeon fittings if in need of the cash. In truth only the die-hard fan will probably notice the changes, but then that's exactly who will be buying *Deeper Dungeons* anyway.

Essentially, though, it's pretty much business as usual down in the dungeons. Those craving a new set of challenges will find plenty to tinker with here, and the ability to access any dungeon without having played through earlier levels will find favour with the more impatient gamer. But those looking for a truly fresh take on the *Dungeon Keeper* theme will have to wait until the end of 1998, when Bullfrog's Sean Cooper will deliver a sequel to Molyneux's much-loved creation.

Edge rating:

Seven out of ten



Format: PC Publisher: Electronic Arts Developer: Bullfrog Price: £20 Release: Out now

C&C: Red Alert

The historical predecessor to *Command & Conquer*, *Red Alert* puts the action squarely in the mid-'50s with Stalin the main threat to the west, and makes it clear right from the off that it's a top-quality title.

While the game offers significant improvements in gaming and strategy over *Command & Conquer*, it is the use of that much under-used PlayStation peripheral, the link cable, which *Red Alert* such an essential purchase. Great against the computer in oneplayer mode, it offers strategy gaming nirvana when played via a link with head-to-head play. Add compatibility with another under-supported PlayStation add-on – its mouse – and *Red Alert* is quite definitely the best warfare outing on the PlayStation yet.

If any criticism can be levelled at the game it would concern its visuals. Never likely to replicate the hi-res display of the PC original, Westwood has lowered the clarity of characters, resulting in a rather muddled look. Surprisingly, though, this never proves over-confusing and is soon forgotten in the red mist of warfare.

For a console which suffers from a distinct lack of cerebral titles, here is a near-as-dammit perfect conversion of a classic only recently eclipsed by *Total Annihilation*. One for wannabe dictators everywhere.

Edge rating:

Eight out of ten



Format: PlayStation Publisher: VIE Developer: Westwood Studios Price: £40 Release: Out now

Layer Section 2

At one time the staple diet of arcade goers, top-down shooting games have been a rare occurrence in the 32 and 64bit age. Essentially a Saturn version of the PlayStation game *Raystorm*, *Layer Section 2* is definitely of the old school. Given the recent dearth of such titles, there are few comparison points, other than Square's excellent *Einhänder* (and even that is an essential side-viewed affair).

Layer Section 2 is packed with all of the usual features, which is both to its advantage and detriment. Enemies attack in patterns that can be traced all the way back to 1942. Power-ups and weaponry are reminiscent of *Raiden*, with lightning attacks and incremental improvements. This Saturn interpretation may lack some of the sophistication of the PlayStation game (mainly in terms of scrolling and 3D effects), but ultimately it is undermined by the overly simplistic action – something which cannot raise the game above the rank of also-ran.

Edge rating:

Six out of ten



Format: Saturn Publisher: Taito Developer: Media Quest Price: ¥5,800 (£30) Release: Out now (Jap)

Duke Nukem 64



After *GoldenEye* and *Turok*, many N64 pundits could be forgiven for thinking that the market for first-person shooting games on the console is sewn-up. But *Doom 64* proved that rehashing old PC classics could, in fact, be a worthwhile endeavour, if not a chart-topping one.

Duke Nukem was well received on its original PC release (receiving eight out of ten in E31), and has dated surprisingly little in the interim. As could have been predicted, the Nintendo version has been neutered – the movie on show at the cinema in the first level is now of the sci-fi rather than sexy variety. Thankfully, the change has not affected gameplay, with altered sections remaining as playable. Graphically, *Duke* is nearly identical to the PC original, the N64's filtering blurring proceedings as usual, while music is of the chuggy American rock style.

While *Duke Nukem 64* uses the standard control pattern laid down by *Turok*, although the analogue stick input is rather too eager, marring an otherwise fine play system. Movement is smooth and swift, as well it should be for an old PC title ported to 'the fastest most powerful games console on Earth', although fourplayer deathmatches suffer badly from slowdown. *GoldenEye* devotees won't find *Duke Nukem 64* as involving, but it remains an interesting second best.

Edge rating:

Seven out of ten

Format: Nintendo 64 Publisher: GT Interactive Developer: Eurocom Price: £55 Release: Out now

Legend of Zelda

As Nintendo finally gives its 256Mbit monster game, *Legend of Zelda 64*, a proper airing, Edge recalls the title that essentially gave birth to the action-RPG genre



Many characters (both friendly and deadly) made it into later episodes



Although its graphics were rather basic, *Legend of Zelda* offered many gameplay touches to match those of its Game Boy and SNES successors



In playing Link's first adventure, now a healthy 12 years old, it's almost possible to hear the cogs whirring in Shigeru Miyamoto's brain as he sets in motion ideas that would evolve their way through each of the game's successors (once the awkward flirtation with side-viewed action in *Zelda II* had passed): the balance of straightforward hack'n'slash gameplay with the more puzzle-orientated dungeons (a difference that, although slight in the first game, would become increasingly important); the variety of enemies each requiring a different strategy to defeat; and the creative use

of the landscape that negated the need for a huge map by making the player cross back and forth rewarding them with new secrets as the game evolved.

Moreover, it would seem that Miyamoto knew right from the beginning the sort of game *Zelda* should be – *Legend of Zelda* is in fact very similar to the classic *Link to the Past* on the SNES. In fact, had the processing power been available to him in 1986, it's easy to imagine that the *Zelda* Miyamoto would have created wouldn't be a lot different to the *Zelda* that will hit the Nintendo 64 come April next year.

E

Publisher: Nintendo

1986

No

Developer: In-house

NES

23

Although the format never really took off in the UK (and passed by almost unnoticed in the US), the MSX system was popular in Korea and, most notably, Japan (where it still commands a hardcore fan base) and also made significant waves in certain parts of Europe (France, Holland, Spain). It's easy to see why certain gamers were drawn to the system: for the time, it was an ideal platform to handle reasonably faithful coin-op conversions.

Of these, the examples from Konami were most definitely the standard bearers, bringing a wealth of superior mid-'80s arcade experiences into the home in style.

Having already released the first

Antiques MSX Collection 2

Was Konami's golden era the mid-'80s on a home computer format? A new compilation intends to clarify the issue...

instalment of its *Konami Antiques MSX Collection* in Japan (the bundle featuring classics such as *Ping Pong*, *Antarctic Adventure*, *Hyper Sports 2*, and *Gradius*), the company is now readying a sequel.

Volume two features ten more resurrections, the most significant being the shoot 'em up *Twin Bee*, the epoch-making beat 'em up *Yie Ar Kung Fu*, the *Scramble*-aping side-scroller *Super Cobra*, and the button-basher *Hyper Sports 3*.

There's no chance of either volume being given an official release outside of Japan, so MSX devotees will have to look to the import scene for a copy. Either that or dig around the Internet for a fully functioning emulator...

E



Anticlockwise from right: *Super Cobra*, *Twin Bee*, *Konami Golf*, *Gradius 2*, *Hyper Sports 3*, *Yie Ar Kung Fu*, and *Konami Billiards*. The titles among these that are coin-op conversions are far from being carbon copies of the originals (as was claimed at the time), but they're entertaining in their own right



Format: PlayStation

Publisher: Konami

Developer: In-house

Release: January (Japan)

Origin: Japan

Stalwarts Atari and Sega deliver new coin-ops up against one from relative newcomer Lockheed Martin

San Francisco Rush: The Rock



San Francisco Rush: The Rock - Alcatraz Edition; the ludicrous prolixity of the title is matched only by the characteristic excess of its courses, epitomised by the outrageous stunt sections on Alcatraz itself (above)



Arcade proprietors will love this - a mere ROM swap should rekindle flagging Rush interest

Timed to coincide with the N64 and PlayStation conversions of *San Francisco Rush*, Atari has announced a follow-up for the arcade. This enhanced version, *San Francisco Rush: The Rock - Alcatraz Edition*, has precisely nothing in common with a certain ill-advised cinematic Sean Connery vehicle (except perhaps for its pointedly OTT car pursuit action).

This will be a low-cost upgrade for arcade proprietors, requiring just a simple ROM swap into the original 3Dfx-powered cabinets. Atari senior staff producer **John Ray** claims to be 'very excited about continuing - *Rush* was such a strong property, I think we have to continue capitalising on it.'

In line with that philosophy, Atari isn't stopping with *The Rock - Alcatraz Edition*; a full sequel (possibly using Voodoo 2 technology), and a similarly themed racer *California Speed* are also in progress. **Edge** will be interested to see if arcade goers will wear so many versions of the same game (though experience with the *Street Fighter* series suggests the puffy-jacket brigade is unbothered by such repetition).

The Rock - Alcatraz Edition's relationship with the N64 and PlayStation versions extends beyond a coinciding release date. Console editions of *San Francisco Rush* were pumped out with extra cars and tracks in order to boost its long-term appeal; *The Rock - Alcatraz Edition* takes these elements and expands on them, with five tracks from the home versions present in improved and extended form. Four new cars, including a high-powered yellow taxi, also put in an appearance. The tenuous Alcatraz connection comes in the form of an

all-new sixth track, a stunt-oriented course set on the infamous prison island.

San Francisco Rush did much for Atari's flagging arcade credibility. **Edge** hopes that its surprise success doesn't encourage the company to squander that asset, eschewing true innovation in favour of a train of increasingly flaccid sequels.

E



Once again, short cuts and intriguing diversions are a crucial part of the game's long-term value - though not so much as in the home versions

Developer	Atari
Release	TBA (UK)
Origin	US

Le Mans 24



Hopefully, *Le Mans* will be a return to form for Sega, following the lacklustre *Scud Race*

Sega, past master of the driving game, has been going through a fallow patch recently – even its Model 3 extravaganza *Scud Race* failed to live up to expectations generated by *Daytona USA* and *Sega Rally*. Prior to the arrival of *Daytona 2*, Sega's latest attempt to correct the slide is *Le Mans 24*, a Model 3 excursion steeped in the atmosphere of the world-famous race.

Six supercars are featured in the game, including three from *Scud Race* – Porsche's 911 GT1, Ferrari's F40, and the McLaren's F1GT. A Mazda 787B, Nissan Nismo GT-R LM, and Sauber Mercedes will also be available.

However, *Le Mans 24*'s most intriguing feature is that it will continue to run after players have finished, a move intended to reflect the 'real' Le Mans, a race which stops for no one. Players can therefore join the race at any time of day or night and in differing weather conditions – in these circumstances the realtime headlamp effects generated by the Model 3 board are worth witnessing.

A series of unforeseen difficulties pushed *Le Mans 24* way behind schedule; its project leader departed to set up AM Annexe, and AM3 is rumoured to have encountered numerous licensing difficulties. It is likely, therefore, that certain famous vehicles may be conspicuous by their absence. But the real meat of *Le Mans 24* is its innovative 24-hour play system, a feature which should go some way to ameliorating their loss.

E

Developer: Sega (AM3)
Release: Out now
Origin: Japan



Le Mans 24's most promising aspect is undoubtedly its 'virtual race' feature, which allows players to join the action during day or night

Behind Enemy Lines



Behind Enemy Lines will have to offer heaps of action to succeed



It's unclear whether *Behind Enemy Lines* will offer any distinct gaming innovations

Following on from *Desert Tank*, the armoured combat game it produced with Sega two years ago, Lockheed Martin has announced *Behind Enemy Lines*. Set in 1999, *Behind Enemy Lines* is an on-rails shooting game in the vein of *Virtua Cop*. But here the player is placed in the turret of a tank as it rolls remorselessly towards enemy lines.

The back story is, as might be expected of a developer with a resolutely militaristic outlook, a clichéd affair. Players represent a 'utopian' New Global Alliance which has assembled an elite task force in order to maintain a world order threatened by a terrorist army.

In much the same style as the tank sections in *GoldenEye*, players can utilise both their machine gun and shells fired from the tank's barrel, triggered by a *GunBlade*-style device mounted on the machine's cabinet.

Behind Enemy Lines uses a distinctly American flavour in its Model 2 visuals, with Lockheed Martin promoting the connection to its Real 3D chip. However, **Edge** is curious to see if, after *The Lost World*, gamers will swallow yet another Model 2 shooter.

E



After the excesses of Model 3, *Behind Enemy Lines* seems dated

Developer: Lockheed Martin
Release: TBA (UK)
Origin: US

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Gallery

CGI from Konami's eagerly anticipated PlayStation espionage thriller leads this month's videogame art showcase, while *Heart of Darkness*, one of the most delayed titles of all time, also puts in a significant showing



Military hardware – of both small and large scale – plays a significant part in Konami's forthcoming PlayStation title *Metal Gear Solid*, and its designers haven't held back in realising their representations of what they think could be weaponry and combat machinery of the future. This scene (left) demonstrates the scale of one of their more ambitious imaginings, while the CGI above shows a slightly – but only slightly – less reserved approach to instruments of a conflict-centric scenario.

Images rendered by Konami artists working from a development facility in Ebisu, Tokyo



These humorous individuals from Parisian-based Amazing Studio's forthcoming *Heart of Darkness* are representative of the kind of creatures players will have to interact with in order to progress through the game, as well as illustrating the level of character design that has gone into this ambitious and much-awaited title during its unusually long development period.

Images rendered using 3D Studio and Photoshop Painter by Amazing Studio's *Heart of Darkness* team





Edge apologises to Probe Entertainment artist Omni Stephenson, whose work was not credited in issue 53; he created every CGI image on page 138 bar the main composition

DEVELOP

VIDEOGAME CREATION UNDER THE MICROSCOPE

The ups and downs of PC 3D acceleration

Hailed as the key to the next generation of PC games, 3D acceleration brings arcade-quality graphics to domestic machinery. Not only that, it frees developers from the performance costs and trade-offs of software 3D, enabling them – in theory at least – to concentrate on the task of building an immersive gaming experience to inhabit their lovingly created 3D world. However, 3D acceleration brings with it some advantages that are not so obvious; and, conversely, numerous pitfalls await those who rush in...

The principal advantage of 3D accelerators is that they shoulder the burden of rendering work, freeing up the CPU of the machine to perform other crucial tasks. This benefit has been enjoyed by custom chip-based consoles for a long time, but now PC users no longer have to witness their hard-earned (and expensively bought) CPU time mean-spiritedly fought over by the game logic and graphics. This allows, for example, more advanced enemy AI, or effects such as 'real' physics (where all game objects are affected by forces such as gravity, and can bounce off surfaces and each other) which, with the CPU strangled by graphics calls, would be a prohibitively slow process otherwise.

But 3D accelerators open up other exciting possibilities. Custom hardware built onto the card can support numerous special effects which would otherwise have to be implemented manually, in software. With these cards, programmers often have to do little more than place a call to a particular API in order to conjure up an effect, whether it be lens flare, coloured lights or transparent explosions.

Herein, however, lurks a trap for the unwary. It's now all too easy for the lazy or amateurish programmer to make such blasé use of hardware special effects, or – as is the case of many contemporary titles – to view them as 'lowest common denominator' effects, ensuring that their game will work on the widest possible range of cards. Viewed in the latter light it's an almost forgivable tactic, yet it shuts out the possibility of evoking surprise and delight in all but the most naïve of gamers. Who can, in all honesty, say they're astounded at the sight of lens flare when they boot up a game? The effect, like so many others, has become so ubiquitous as to be tiresome.

This disadvantage becomes even more apparent when programmers actually do try something new, as many 3D cards actively discourage clever 'hacks' to generate special effects – their architecture denies the programmer access to critical areas such as the video framebuffer. The OpenGL version of *Quake*

showcases this flaw. Granted, its visuals are in general crisper and more fluid than the standard version, but arrive at a section of a level featuring water and its shortcomings are revealed. OpenGL doesn't permit software overlay, so id's programmers had to use a complex system of moving the actual polygon vertices to implement the 'rippling' water effect, a necessarily clumsy and processor-hungry solution which causes glitches at the boundaries of the water and ruins the rippling effect.

This manner of problem is compounded by the 'lowest common denominator' compatibility issue, as even if some cards can support these effects, others may not. Standard APIs such as Direct3D and OpenGL typically have no provision for them. These standard interfaces, as well as restricting games to a certain subset of the common 3D card features, also have the effect of adding yet another layer of software to slow the game down. Gone are the days when a game could truly be said to stretch the limits of the hardware it runs on – now games waste massive percentages of their time dealing with APIs and operating system routines which then use even more code in the form of drivers before the hardware actually gets any instructions.

However, it is these interfaces which may prove to be the saviour of 3D cards. Without standards such as Direct3D and OpenGL, games would have to be written for one, or at most a handful, of the popular 3D cards, a situation that arose while the 3D accelerator card was in its infancy, in which no one would be quite sure of which standard to support until a clear winner appeared. Even then, card upgrades could render older software obsolete. With standard APIs, however, cards can be interchanged without the software even becoming aware in some cases, and when newer cards appear, older software will simply run more smoothly at higher resolutions. Admittedly that software will not be making full use of the card, but few will notice.

Obviously, 3D cards make it far easier to write 3D games. Developers no longer need to spend months optimising an engine to display their creations – they merely send the data to the API and let it do the hard work. Coders don't even need to know what sort of hardware the user has, as it is all taken care of. This advantage may well turn out to be a double-edged sword, however. While on one hand it enables the programmer to code without worrying about the graphics, and gives the user peace of mind that their card will work with the game, inexperienced programmers may, through ignorance of the fundamentals of 3D mechanics and graphics, produce substandard games.

One of the trickiest tasks in many 3D games is camera positioning. Though a trivial task in firstperson games such as *Quake*, thirdperson games (eg *Mario 64*, *Tomb Raider*) have roaming cameras that follow the player. Great care must be taken to ensure that the player has the best view of the action and can control the character easily – and to prevent ugly instances where the camera passes through a solid object. Programmers who are simply using the API and libraries without really understanding the theory behind them may not have the experience necessary to program such complicated behaviour.

3D cards have established themselves as the future of PC games. Programmers now have the power at their disposal to shape their flights of fancy into games that, due to technical constraints, would have been impossible to write just a few years ago. It remains to be seen whether the ease of shaping these 3D worlds will translate into new movements, pushing the boundaries of AI and interactivity, or whether development slips into a new dark age touting eye candy over gameplay.



Quake amply demonstrates the wonders of the OpenGL API – until players reach an expanse of water, that is...

E

Edge is the only magazine outside of Japan to have already played *Sega Rally 2*, the long-awaited follow-up to the classic Model 2 coin-op. The sequel runs on the Model 3 board and pushes the technology far further than anything before. In fact, it's the most impressive and realistic racing game ever created. E55 will bring an exclusive report.

3Dfx Interactive's benchmark performance for accelerated PC graphics is still unmatched in the home computing field. And it's about to be taken to another level. In issue 55 Edge reports on the next wave of 3D PC performance as generated by 3Dfx's amazing Voodoo 2 chipset.

System 3 belongs to a golden era in videogaming. It prospered when 8bit legends such as its acclaimed isometric adventure *The Last Ninja* wowed gamers who had become jaded by uninspired graphics and simplistic content. Edge visits the company next month to take a look at its developments in both the arcade and home arenas.

With the arrival of titles such as *Ultima Online*, workable, global-scale networked gaming of a high quality is becoming a reality. Edge 55 looks at the many facets of the complex and ever-evolving online gaming scene, speaking to Dr. Richard Bartle (the father of it all, as creator of *M.U.D.*), looking at the technology and servers that have brought about a revolution, and considering what lies ahead...

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